Sententialism. Why not?

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ABSTRACT

As is generally agreed, there are good reasons to take a propositional attitude attribution like

Olga believes that Cicero is smart

to express the holding of a relation between Olga and the denotation of 'that Cicero is smart'. But what does 'that Cicero is smart' denote? According to the so-called *face-value theory*, it denotes a proposition. While there is no agreement on what propositions are, they are taken to be entities not reducible to sentences. According to sententialism, by contrast, 'that Cicero is smart' denotes the sentence "Cicero is smart". Sententialism is generally considered to be obviously inadequate, and the aim of this dissertation is to show that sententialism is in fact as good an option as the face-value theory is, if not a better one. According to the sententialist account that I develop, Olga believes that Cicero is smart if she believes something which we can *represent* with the sentence "Cicero is smart". As I show in Chapter 2, by relying on some features of representation, sententialists seem able to account for propositional attitude attributions in quite an interesting way. The main reasons why sententialism is generally considered doomed are the famous Church translation argument and a problem raised by Schiffer. I examine them in Chapter 3, where I conclude that these allegedly fatal objections do not in fact succeed in showing that sententialism is incorrect. In Chapter 4 I deal with other attributions, i.e. the so-called *wh-attributions*, such as

Jim knows what Rose wants,

and I show that, when it comes to 'wh'-clauses, sententialism seems not only a viable alternative to the face-value theory but actually a better one. The general conclusion I reach is that the sentence against sententialism has been passed too quickly and that sententialism is indeed a viable account of our talk about attitudes.

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INTRODUCTION

In this note a definitive procedure will be provided for catching a lion in a desert: Let Q be the operator that encloses a word in quotation marks. Its square Q^2 encloses a word in double quotes. The operator clearly satisfies the law of indices, $Q^m Q^n = Q^{m+n}$. Write down the word 'lion' without quotation marks. Apply to it the operator Q^{-1}. Then a lion will appear on the page. It is advisable to enclose the page in a cage before applying the operator.

Lion Hunting & Other Mathematical Pursuits

Propositional attitude sentences, such as

Olga believes that Cicero is smart
Gabriel fears that Rose will not come to the party
Dave knows that snow is white

are generally considered to be difficult to account for in a semantic theory, since they are considered to raise some challenging questions and to lead to some puzzles that are apparently not easily answered and solved. Frege's puzzle is exemplary:

> *a*=*a* and *a*=*b* are obviously statements of differing cognitive value; *a*=*a* holds *a priori* and, according to Kant, it is to be labelled analytic, while statements of the form *a*=*b* often contain very valuable extensions of our knowledge and cannot always be established *a priori* … Now if we were to regard equality as a relation between that which the names '*a*' and '*b*' designate, it would seem that *a*=*b* could not differ from *a*=*a* (i.e. provided *a*=*b* is true)… What we apparently want to state by *a*=*b* is that the signs or names '*a*' and '*b*' designate the same thing, so that those signs themselves would be under discussion; a relation between them would be asserted … In that case the sentence *a*=*b* would no longer refer to the subject matter, but only to its mode of designation; we would express no proper knowledge by its means (Frege 1892/1984: 157).

The puzzle has been so much discussed (and may be *spectacularly overvalued*, as Predelli 2013: 13, f. 16 maintains) that it has been solved and dissolved probably in every possible way. The general take on this and other puzzles is either to hold that usual denotations are in the end adequate or,

with Frege, to hold that denotations do not exhaust meanings, so that *a*=*a* and *a*=*b* have different meanings. Together with the 1892 Frege (but not with the 1884 one!), moreover, the general take is to hold that signs *surely* cannot be adequate and s*ententialism*, according to which in sentences like

Olga believes that Cicero is Cicero
Olga believes that Cicero is Tully

the very sentences "Cicero is Cicero" and "Cicero is Tully" are denoted, has been widely seen as "more of a curiosity than a contender" (Burge 1980: 57) to the so-called *face-value theory*. According to the face-value theory, in those sentences a proposition, an entity not reducible to a linguistic item, is denoted.

My aim in this dissertation is to show that sententialism is in fact as good an option as the face-value theory is, if not a better one.

Both sententialism and the face-value theory share the following two theses:

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;
(ST) 'That'-clauses are singular terms.

These theses are so agreed upon that they are often simply implicitly endorsed without discussion. But they can be and have been rejected, most famously by Russell (1910), Prior (1963) and Quine (1960), and even though the theses are widely shared, they need defence. We will therefore start with discussion of these theses in **Chapter 1.** We will see that although we cannot prove that (RP) and (ST) are true, there are various good reasons why we should favour an account that endorses them. As is generally held, one of the main reasons for endorsing the theses is the validity of inferences like the following:

Olga believes that Cicero is smart
Gabriel believes everything Olga believes
Thus, Gabriel believes that Cicero is smart.

We will consider the various alternative explanations for the validity of such inferences, and we will conclude that while it should be recognized that endorsing the theses is not the only possible explanation, it seems to be the best one. There are, however, some data that seem to

show that the theses (RP) and (ST) cannot be correct (Prior 1971). For 'to know' admits of singular terms, as shown by the perfectly grammatical

Olga knows Laura.

If propositional attitude predicates are relational, and if it has been stipulated that 'Bob' is the name of a *relatum* in

Olga knows that Cicero is smart

then one would expect

Olga knows Bob

to be true if

Olga knows that Cicero is smart

is. But this is not the case: Olga may know that Cicero is smart, so that the latter sentence is true, but not be acquainted with Bob, be it a sentence, a proposition, a fact, Cicero, a property or what have you. As we will see, though, all things considered it will prove to be better to endorse (RP) and (ST), and to explain these data away by holding that propositional attitude predicates are ambiguous. The thesis that the predicates are ambiguous will, moreover, be shown to be independently justifiable. Putting everything together, we will conclude, in accordance with both sententialism and the face-value theory, that 'that'-clauses denote one of the *relata* of the relation designated by a propositional attitude predicate.

According to the face-value theory, this *relatum* is a proposition, and the thesis

(P) 'That'-clauses denote propositions

should be added to (RP) and (ST). While there is no agreement on what propositions are, they are taken to be entities not reducible to sentences. To use Schiffer's way of putting this (2003: 47), for whatever content is, sentences are entities that *have* a content, while propositions are entities that *are* contents. According to the face-value theory, therefore, a sentence like

Olga knows that Cicero is smart

expresses the holding of a relation between Olga and something not reducible to a sentence. According to sententialism, on the other hand, (P) should be replaced by

(S) 'That'-clauses denote sentences.

According to sententialism, therefore, the *relatum* denoted by a 'that'-clause is a sentence, and in developing a sententialist account we should start by understanding what it means to have an attitude to a sentence. We will tackle this issue in **Chapter 2**. As we will see, according to the sententialist account that I will develop, Olga believes the sentence "Cicero is smart" if she believes something which we can *represent* with the sentence "Cicero is smart". In representing something, we use the resources available to us. Take a map. We could represent London's Underground by drawing a map of it. In this case, our representational tools are lines of different colours and names of different stops in a 2-D space. Or take fruits. We can represent their shapes by using, as tools, regular polygons in a 2-D space. Among our representational tools is our own language. According to sententialism, just as we can employ geometrical shapes in order to represent the shapes of fruits, so we denote sentences to represent attitudes. But when is it the case that something can represent something else? A first thing to notice is that, clearly, adequacy depends on what we are interested in when we are representing something. For take again a map of London's Underground. If we employ only straight lines between dots, we can represent London's Underground. But something is missing: for example, we cannot represent both the real length of the journeys and the relative position of the various stops. Moreover, depending on what we are interested in representing, we are guided by some principles, and we take it to be a *desideratum* that the representation we end up with is in accordance with those principles. As I will show, considerations like these are what sententialists can rely on in solving Frege's and Kripke's (1979) notorious puzzles. From the point of view of the account, the puzzles are to be solved (or dissolved, or shown to be essentially puzzling) by relying on the fact that two sentences expressing the same thing can nonetheless be different as to their representational aptness. Thus, in Chapter 2 I will conclude that for what concerns the notorious puzzles sententialism is in the end an adequate account.

Sententialism is generally considered doomed, though. The main reasons why sententialism is usually simply discarded are the famous Church (1950) translation argument and a problem raised by Schiffer (2003:47). We will consider them in **Chapter 3**, where I will show that these allegedly fatal objections do not in fact succeed in showing that sententialism is incorrect. At bottom, both objections rely on the idea that if we account for propositional attitude sentences in terms of language-dependent entities that have a content instead of language-independent entities that are those very contents, then contents disappear and this cannot be correct. For when we ascribe an attitude, the content of the attitude is what we are talking about. I will

suggest that sententialists may answer both criticisms on the same grounds, i.e. by exploiting the recognition of this simple fact:

> It is a long established habit of human beings to pluck out the meanings of phrases, whatever they may be, and devour them willy-nilly (Meckler 1956: 325).

For our purposes of assessing sententialism, it will be particularly important to recognize that this immediate understanding also concerns expressions that are not used, but merely mentioned: you cannot say " 'Olga' " without saying 'Olga'; you cannot listen to " 'Olga' " without listening to 'Olga'. Moreover, I will show that sententialists may appeal to that very fact in dealing with another problem, of anaphoric reference, pointed out by Bach (1997). Bach's problem will also allow us to consider indexicals, and we will see that, contrary to what has sometimes been held in the literature (Schiffer 2003: 302-309), sententialism can explain the behaviour of indexicals occurring in propositional attitude sentences. Putting together the considerations of Chapters 2 and 3, whether or not it is better than the face-value theory, we will conclude that sententialism is at least a viable account of sentences like

Olga believes that Cicero is smart.

Having thus rescued sententialism for propositional attitude sentences, in **Chapter 4** we will see how well sententialism can deal with other attributions, i.e. the so-called *wh-attributions*, such as

Jim knows whether Rose likes flamingos,

in which the complement of the predicate is not a 'that'-clause, but an indirect question. I will show that when it comes to *wh*-attributions, the difference between taking 'wh'-clauses to denote a linguistic item or a language-independent one is tantamount to the difference between holding that 'wh'-clauses denote questions or that they denote answers. We will then see that puzzlement attributions, such as

Jim wonders what is the biggest number,

cannot always be accounted for in terms of answers. For sometimes we stop wondering, when we finally understand that the question was somehow misplaced and that it has no answer. The possibility that a question lacks a correct answer will, moreover, show that actually all 'wh'-clauses seem to denote questions. I will then discuss some classic problems concerning *wh*-

attributions – the problem as to whether their truth-conditions are essentially contextual and the so-called *problem of convergent knowledge* (Schaffer 2007; Stout 2010). I will show that while the problem of convergent knowledge is seriously problematic for propositionalists, from the sententialist point of view it is easily and very naturally solved. Thus, when it comes to 'wh'-clauses, sententialism seems not just a viable alternative to the face-value theory, but actually a better one. There is no compelling reason for treating 'that'- and 'wh'-clauses homogeneously. Nonetheless, I will show that a homogeneous treatment is natural, very plausible and methodologically welcome. I will then conclude that *wh*-attributions suggest that the version of sententialism for 'that'-clauses put forward in this dissertation may indeed be not just a viable alternative to the face-value theory, but actually a better one.

The general conclusion will be that the sentence against sententialism has been passed far too quickly.

I take the liberty to use this introduction also to thank some of those people who, in some way or other, made this dissertation much better than what it would have been without their help. Mark Textor, my supervisor at King's College London for the last three years, generously gave me a one hour tutorial every week. I am very thankful for all the time he dedicated to my work. Each week I left his office with a new problem but also with a suggestion on how to fix it. I am thankful for all the problems and, even more, for all the suggestions. Marco Santambrogio, my previous supervisor, introduced me to the philosophy of language and since then kept on reminding me that we should resist any short-cut and we should call any thesis into question. I am glad for this and I hope that I learnt the lesson. I am indebted to Jim Higginbotham for what he taught me in semantics. He also taught me that in philosophy one should have the courage of defending a theory one finds correct, no matter how many disagree. I am sure he would be very proud of me in knowing that I ended up disagreeing with him as well. I had a chance to discuss sententialism at length with Stephen Schiffer and Harty Field and I am indebted to them for all I learnt in our extremely enjoyable conversations. I still like sententialism, but, thanks to Schiffer, I am now completely aware of why one might not like it. I am thankful to Gabriele Galluzzo, Chris Hughes and Giorgio Lando for some rewarding and helpful conversations on the metaphysical costs of sententialism and on the metaphysics of words.

I presented some of the theses advanced in this dissertation at various conferences and workshops - HU/KCL 2015, King's College London; UNC-KCL 2015, University of North Carolina at Chapel Hill; PhiLang2015, University of Łódź; ECAP 8, University of Bucharest; ANP 2014, Balliol College, Oxford; Language and Mind, Università Statale di Milano; KCL/HU 2014, Humboldt-Universität zu Berlin; The Philosophy of Translation, University of Zürich; SIFA GC 2013, Università di Cagliari; OFA 9, University of Lisbon; Philosophers of Language in Gargnano 2012, Gargnano, Italy; ECAP7, Università San Raffaele, Milan - and various seminars at King's College London. I greatly benefited from the questions and comments I received on all those occasions. In particular, thanks to Max Cresswell, Kit Fine, Yang Guo,

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1
PROPOSITIONAL ATTITUDE PREDICATES AND 'THAT'-CLAUSES

Take a sentence like

Dave loves Laura.

If Dave loves Laura, then there is somebody, namely Laura, who is loved by Dave. Furthermore, if Dave loves Laura and Gabriel likes Laura, then there is somebody, namely Laura, whom Dave loves and Gabriel likes. In our sentence, then, the predicate seems to designate a relation, and the *relata* seem to be the denotations of 'Dave' and 'Laura'.[1] Now take a sentence like

Olga believes that Cicero is smart.

If Olga believes that Cicero is smart, then there is something, namely that Cicero is smart, that is believed by Olga. Furthermore, if Olga believes that Cicero is smart and Gabriel knows that Cicero is smart, then there is something, namely that Cicero is smart, that Olga believes and Gabriel knows. On the basis of the similarities between our two sentences, it seems obviously correct to conclude, firstly, that 'to believe', like 'to love', designates a relation and, secondly, that the *relata* of the relation designated by 'to believe' in

[1]For singular terms, I follow Donnellan 1966: 54-55, and use the term 'denotation' for the relation, whatever it is, that a singular term bears to its worldly correlate, in order to be neutral and thus to allow that different expressions (such as proper names and definite descriptions) may function in different ways while ultimately designating the same thing. For predicates, I will instead follow Liebesman 2015, and use 'to designate' as the relation, whatever it is, that a predicate bears to its worldly correlate. Finally, I will use 'to express' for the relation, whatever it is, that a sentence or an utterance of a sentence bears to its meaning. For those who prefer to see two meanings, one at the level of senses and the other at the level of references, denotation and designation are at the level of references, while expression should be taken to be the relation between a sentence and its sense. These are purely terminological choices, and should be taken to carry no substantive theory of what it is for a sentence to mean what it means or for a sub-sentential bit to denote or designate what it does. In particular, a predicate will be said to designate a property or a relation, but this should not be intended as tantamount to holding that predicates designate properties and relations in the same way in which singular terms denote individuals. Moreover, for ease, when nothing relies on this, I will speak simply of sentences and not of pairs of sentences or clauses and contextual factors or indexes, or of utterances.

Olga believes that Cicero is smart

are the denotations of 'Olga' and 'that Cicero is smart'.

These theses are in fact generally taken to be part of the so-called *face-value theory* of propositional attitude sentences (Bach 1997: 221-224; Bealer 2002: 86; Moltmann 2003: 12-14; Recanati 2004: 229; Rosefeldt 2008: 301-302; Salmon 1983: 5-6; Schiffer 2003: 12-14; Wettstein 2004: 165-166). What does this theory amount to? The answer to this question is actually less straightforward than one would expect, given how this theory is named. First of all, *the* face-value theory is not actually *one* theory. For, as Bach (1997: 222-223) notes, different authors have phrased the theory in substantially different ways. Fodor (1981: 178), for example, held that propositional attitudes should be *analysed as relations*; but Fodor's thesis concerns the attitudes, not the attributions of those attitudes, which is what the face-value theory is supposed to be about. Soames (1988: 106) argued that to believe that Cicero is smart *is* to believe the proposition that Cicero is smart, but this leaves open how we should take the *is*: are we talking about logical form, the semantic contribution of 'that'-clauses, the truth-conditions of the sentences or what? Burge (1980: 55) held that propositional attitude sentences have the *logical form* of a relation between a person and something indicated by the *nominal expression* following the predicate. Similarly, but phrased in terms of truth, not of logical form, Fara (2013: 250-251) and Schiffer (2008: 268) maintain that according to the face-value theory, firstly, sentences of the form *A believes that S* are *true* just in case the referent of the 'A' term stands in the belief relation to the thing to which the 'that'-clause term refers, and, secondly, that these 'that'-clauses refer to propositions. According to Schiffer (2003: 12), the first claim implies that propositional attitude sentences consist of a two-place *transitive predicate* flanked by slots for two singular argument terms. But a theory composed of these theses can hardly be an account of propositional attitude sentences in general. Firstly,

Everybody believes that Cicero is smart

is a propositional attitude sentence, but there is no denotational 'A' term. Secondly,

Olga told Gabriel that Cicero is smart

is a propositional attitude sentence, but the predicate designates, if a relation at all, a three-place relation holding between Olga, Gabriel and something somehow connected with the 'that'-clause. Stalnaker (1987: 140-141) holds instead that the transitive propositional attitude predicate designates a relation to a proposition denoted by the sentential complement. Similarly, in 1992 Schiffer (1992: 505) maintained that the predicate designates a relation, and a 'that'-clause is a

referential singular term whose reference is a proposition and Recanati (2004: 229), Richard (1990: 7) and King (2014a: 7) also phrase the face-value theory in these terms. It is not clear whether Stalnaker's and Schiffer's are equivalent formulations – is a sentential complement a referential singular term? – but it is clear that they point in the same direction. These formulations concern not just attitudes, but their attributions, and are not subject to the obvious problems that the other formulations above incur. Thus, I think we can take the following to be the best way of phrasing the theory:

(THE ALLEGEDLY FACE-VALUE THEORY)
(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;
(ST) 'That'-clauses are singular terms;
(P) 'That'-clauses denote propositions.

So, the theory tells us something about what propositional attitude predicates designate, something about what in the sentences provides us with one of the *relata*, and, furthermore, something about what this *relatum* is.

In this chapter we will focus on the first two theses, (RP) and (ST). The aim is to understand whether there really is something face-value in them, which could support the claim that it is better to take them to be true.

We will start with (RP), and we will find genuinely good reasons to endorse this thesis. But these reasons *pro* seem counterbalanced by some evidence *contra*. We will conclude that it is better to save (RP), and to explain the apparently conflicting data away by holding that propositional attitude predicates are ambiguous (§1.1).

Theses (RP) and (ST) are often conflated, and the good reasons for endorsing (RP) are generally also taken to be good reasons for endorsing (ST). But I will show that actually these reasons only support (RP), and so (ST) will still have to be discussed. Singular terms are a special kind of syntactic unit, i.e. those that purport to denote some things, and thus in order to assess (ST) it should first of all be established whether 'that'-clauses are syntactic units. We will see that we have good reasons to think that this is the case (§1.2.1). Putting everything together, we will conclude that 'that'-clauses are syntactic units in a position open to singular objectual quantifiers. But this still leaves open whether 'that'-clauses are singular terms, in accordance with

(ST) 'That'-clauses are singular terms,

or quantified phrases not reducible to singular terms. We will then see that it is in fact better to endorse (ST). Moreover, we will discuss some objections that can be raised against the thesis (ST), and we will see that they can and should be explained away (§1.2.2).

The conclusion will be that there really is something face-value in theses (RP) and (ST) and that it is better to endorse them. Put differently, it is best to take 'that'-clauses to be singular terms that denote one of the *relata* of the relation designated by a propositional attitude predicate.

But what is this *relatum* denoted by a 'that'-clause?

According to the face-value theory's final tenet, i.e.

(P) 'That'-clauses denote propositions,

the *relatum* is a proposition. But is this the only way to go? This will be the topic of the next chapter.

1.1 RELATIONAL PREDICATES

Different kinds of considerations have been put forward in the literature to support

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations.

In §§1.1.1-1.1.2 we will focus on those considerations that, under scrutiny, prove to be either not exploitable in a defence of the thesis or too weak. We will see that if some more forceful reasons can be found, they should be found in the linguistic domain and in particular in the very domain of propositional attitude sentences. We will see that we need a workable characterization of when a relational predicate occurs in a sentence, and in §1.1.3 we will provide one. By relying on that characterization, we will see in §§1.1.4-1.1.5 that there are indeed some good reasons why we should take (RP) to be true. But these reasons *pro* seem counterbalanced by some evidence *contra*. We will discuss this contrary evidence in §1.1.6. We will conclude that it is better

to save (RP), and to explain the apparently conflicting data away by holding that propositional attitude predicates are ambiguous.

1.1.1 THE ACCUSATIVE OF INTENTIONALITY

In assessing the thesis

> (RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations,

a first consideration that has been discussed is the so-called *accusative of intentionality* (Matthews 2007: ch. 4; Prior 1976: 21-24; Ryle 1929-1930: 92; Wettstein 2004: 164), i.e. the fact that propositional attitudes are intentional and, as such, always involve relations toward some things. Given this, one may hold that since *attitudes* are relational, so should the predicates be that occur in the *attributions* of those attitudes.

Since the accusative of intentionality involves considerations of *attitudes*, not of *attributions of attitudes*, if it were a good reason, then (RP) would have been supported by some considerations in philosophy of mind and epistemology. Unfortunately, however, precisely because the accusative of intentionality concerns the attitudes and not their attributions, one might immediately reject it: propositional attitudes are a feature of reality whereas attributions belong to language, and it is not clear why we should think that there is a mirroring between the two. As Matthews (2007: 102) and Wettstein (2004: 164) remark, assuming this mirroring is in fact unwarranted: our reporting practices have evolved to serve social, communicative ends that, for all we know so far, do not necessarily match the nature of what they report. For example, drinking is always drinking something, but from the alleged accusative of drinking it does not follow that we should take

> We drank furiously

as a relational sentence. The accusative of intentionality, therefore, does not seem able to positively support (RP). Nonetheless, I think we should still recognize some force to this consideration: if attitudes are relational, considerations of attitudes cannot rule out a relational account of predicates occurring in attributions of attitudes. Put differently, take being alive. Is it a relation we have to something, a property we enjoy while alive, or what? We do not know. Thus, considerations of what being alive is can hardly elucidate how to account for

I am alive.

With attitudes the situation is a bit different: no matter how complex it is to account for attitudes, we intuitively take them to be relational (even if this is not completely uncontroversial, see Matthews 2007). Therefore, if we are right and attitudes are really relational, we cannot on the basis of considerations of what attitudes are rule out a relational account of the predicates occurring in the attributions of attitudes. For those considerations would perfectly match a relational account of the predicates. I think we should concede to the accusative of intentionality this conditional force. But we should also grant that this is such a limited force: holding that some widespread considerations in another field do not rule out considerations in semantics is surely not the best way to support a semantic thesis. It thus seems that if some more forceful reasons can be found, they should be found in the linguistic domain. Let us move to this.

1.1.2 A SIMILARITY ARGUMENT

A first linguistic consideration that has been put forward (McFetridge 1975-1976: 137-138; Parsons 1993: 443) as able to support

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations

is the following: as it occurs in sentences like

Olga believes the rumour about Cicero
The jury did not believe the witness's testimony
Olga believes Gabriel's theory,

'to believe' is clearly relational. From this datum, one can try to hold that, *similarly*, in

Olga believes that Cicero is smart

'to believe' should also designate a relation.

Is this a good argument in favour of (RP)? As it stands, this argument does not seem a good one. For, as Recanati (2000: 31) and Rumfitt (forthcoming) remark, the two kinds of constructions – those in which 'to believe' is followed by a definite description and those in

which it is followed by a 'that'-clause – are different and independent. It would be like arguing that from the fact that in

Jim drank three beers

'to drink' designates a relation between a subject of the drinking and an object of the drinking, it follows that in

Jim drank furiously

'to drink' designates a relation. What would the *relata* be? One can try to improve the argument by noticing that an inference like

Olga believes the rumour about Cicero
The rumour about Cicero is that Cicero is smart
Olga believes that Cicero is smart

seems to be a valid instance of the substitution of identicals and thus seems to provide a link between the two constructions.

It certainly *seems* that 'is', as it occurs in

The rumour about Cicero is that Cicero is smart,

is equative, identifying what 'the rumour about Cicero' and 'that Cicero is smart' allegedly denote, so that the inference certainly seems an instance of substitution of identicals. Nonetheless, it is not clear that it really is.

First of all, not all agree that there is in fact something like an equative copula (Gamut 1990: 187-191; Lockwood 1975: 474-481). They suggest that even in

Cicero is Tully

'is' should be taken as predicative, introducing the predicate 'Tully', which designates something analogous to what 'identical to Tully' designates. There are some arguments in favour of the necessity of distinguishing the 'is' of identity from the 'is' of predication. For example, one argument is that only in some cases can we substitute 'is equal to' or 'is identical to' for 'is'.

Those cases, one may hold, are the cases in which 'is' designates identity. The following sentences,

Cicero is equal to Tully
Cicero is identical to Tully,

for example, express what

Cicero is Tully

expresses, but the following,

Cicero is equal to white
Cicero is identical to white,

instead, if they express anything at all, clearly do not express what the following expresses:

Cicero is white.

But it should be admitted that arguments like this are far from conclusive. One may hold that the possibility or not of substituting 'is equal to' and 'is identical to' is due not to the occurrence of different 'is's, but to what follows the predicate: as Lockwood (1975: 479) urges, "it is tendentious to say that a substitution has been carried out upon 'is', as opposed to ['Tully']". Therefore, even if there are some arguments in support of the thesis that 'is' can designate identity, these arguments are not without replies, and we cannot take it as obviously true that 'is' can designate identity.

Secondly, even if 'is' in English can in fact designate identity, it is not obvious that it designates identity in something like

The rumour about Cicero is that Cicero is smart.

Pryor (2007), for example, holds that what we have here is an instance of the so-called *specificational copula*. As the label suggests, this copula is supposed not to identify, but to specify in some way or other the subject, so that 'that Cicero is smart' is not denoting anything, and the argument

Olga believes the rumour about Cicero

The rumour about Cicero is that Cicero is smart
Olga believes that Cicero is smart

is not, in the end, an instance of substitution of identicals. Now it is not obvious that there is a specificational copula. Pryor remarks (2007: 237-238) that there being a specificational copula is supported by the fact that we may have both

The man Baptiste saw was Cicero, wasn't *it*? (specificational)
The man Baptiste saw was Cicero, wasn't *he*? (equative).

This is clearly not a conclusive argument in favour of the specificational copula. But it should be recognized that there are no knockdown arguments for the copula to be equative in

The rumour about Cicero is that Cicero is smart

either, so that it is an open issue whether the argument above is a case of substitution of identicals.[2] But then it is left open whether sentences like

Olga believes the rumour about Cicero
The jury did not believe the witness's testimony
Olga believes Gabriel's theory

can also show that 'to believe' is relational as it occurs in

Olga believes that Cicero is smart.

Thus the similarity argument is inconclusive, and constructions like

Olga believes the rumour about Cicero

[2] Moulton 2015: 311-312 holds that in
The idea/myth/story/rumour/fact is that Bob is a fraud
the predication is equative: what the description denotes, so does the 'that'-clause. Then he holds that literally equating ideas and stories with propositions cannot be correct: "[s]tories can be long and boring. But propositions can't be. Rumours can be mean; they can be spread by people. But you can't spread sets of possible worlds, nor can worlds be mean. Myths can be old and Greek; ideas can be new and exciting. None of these is something that a proposition can be". Thus he concludes that a clause does not denote a proposition. Without discussion, Moulton therefore concludes that clauses do not denote propositions by relying, together with many others (for a recent example, see Braun 2015: 151), on the claim that in sentences like the one he considers the predicate designates genuine identity. But this is not obviously the case, since one may hold that 'is' is an instance of the specificational copula, or that 'is' here is to be really taken as tantamount to 'can be represented by', 'has the content', etc.

do not seem to be good reasons in favour of either rejecting or endorsing

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations.

1.1.3 A WORKABLE CHARACTERIZATION

The discussion of the accusative of intentionality and of the similarity argument shows that we have two requirements on the considerations that can constitute good reasons *pro*

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations.

Firstly, if some more forceful reasons can be found, they should not come from considerations in philosophy of mind or epistemology, but should be found in the linguistic domain. Secondly, those reasons should only be found in the domain of propositional attitude sentences, since considerations of other constructions involve other theses that open up new issues. But what data concerning propositional attitude sentences can show us whether (RP) is to be taken as true? In order to answer this question, it should first be established when a relational predicate occurs in a sentence. In this section, I will provide what I take to be a rough but workable characterization. When we have characterized sentences in which relational predicates occur, we will see in the next two sections that there are indeed some good reasons to take propositional attitude sentences to be among them.

So, when is it that a relational predicate occurs in a sentence? Unfortunately, we do not have an obviously correct answer. One might try to dismiss the requirement of formulating an answer by holding that, since we are speaking about natural languages, we can rely on the intuitive grasp of native speakers for determining when a relational predicate occurs in a sentence of that language. But this move is hardly satisfactory, for at least two reasons: first of all, it is not clear whether speakers have this piece of intuitive knowledge; secondly, it is usually unclear why we should trust ourselves as speakers. Something that does not rely on the intuitions of the speakers would be better. Let us then start again by our fairly clear example of a sentence in which a relational predicate occurs:

Dave loves Laura.

In this sentence there are two open argument positions – *( ) loves ( )*. Thus, one may try to suggest that a predicate that designates an *n-place* relation occurs in a sentence iff we can detect *n* open argument positions.

But, clearly, this is not enough. Take

Dave is asleep and Laura is awake.

We can obtain

( ) and ( ),

but we obviously do not want to hold that 'and' designates a relation. In the usual way, we can then try to hold that a predicate that designates an *n-place* relation occurs in a sentence iff we can detect *n* open argument positions into which we can substitute an English existential quantifier. For from

Dave is asleep and Laura is awake

we cannot move to

*Dave is asleep and something.

Of course, following Prior (1955-1956: 200-201), we can build *a mixture of English and Mathematics* in which we in fact have sentential quantifiers, such as his *thether*, in which we can translate the English

Every statement has the same truth-value as itself

as

If and only if anywhether then thether.

Moreover, we can even hold that in fact we would be better off if we introduced such a quantifier (Künne 2003: 356-373). But this does not change the fact that English, as it stands, is not like that. As Prior himself recognizes, "the logician has no alternative to talking in this way so long as the natural languages suffer – as all of them do suffer – from a paucity of quantifiers"

(1955-1956: 200). Since we are here considering English, the fact that we *could* obtain something analogous to

*Dave is asleep and something

– or even that it would better if we did find a way to obtain something like this – is irrelevant. In English, that sentence is indeed ungrammatical. Thus the move of requiring that the open position can be filled by an English existential quantifier is promising, but it is still not enough.

For according to this definition, 'is' designates a relation, given that from

Dave is excellent

we can detect two positions, and

Dave is something, i.e. excellent

is grammatical. We would like to have, so to say, the right kind of quantifiers, but distinguishing those we want is not easy and defining relational predicates on the basis of quantifiers of counts as an explanation of *obscura per obscuriora*. Something that does not rely on a definition of what quantifiers we want would be much better.

Another option is the following. Take

Dave is excellent,
Dave exemplifies excellence.

According to our tentative insufficient characterization, a relational predicate occurs in both, since we can obtain both

( ) is ( )
( ) exemplifies ( )

and

Dave is something
Dave exemplifies something.

One way to characterize our notion of a relational predicate such that the first is excluded, as desired, would be to say that the first is ruled out because 'excellent' is not a singular term. But this would give us wrong results: 'some books' is not a singular term, but in

Dave bought some books

'to buy' intuitively designates a relation.

Thus we are holding that a predicate designating an *n-place* relation occurs in a sentence only if we can detect *n* open argument positions into which we can substitute an existential quantifier. We are now looking for further conditions, and we need to rely on something different than quantifiers and singular terms. Something a bit less obscure is, I think, the notion of a relation itself. Relations do raise various kinds of metaphysical problem. Is *being a friend* really a property, or better a relation? Are there any relations? What is it that makes the relation of love between Dave and Laura something different from the relation of love between Laura and Dave, i.e. where, if anywhere, does the order come from? Are there any non-symmetric relations? In order to solve the different issues we would have to dig deeply into the fundamental metaphysical notions. But even if the metaphysics of relations is complex, there is a characteristic of relations that I think we can exploit here: relations are tightly connected with other relations. For example, if Dave loves Laura, then Laura is loved by Dave, and if Dave is as old as Gabriel, then Gabriel is as old as Dave. Let us then take again

Dave is excellent,
Dave exemplifies excellence.

With the second, we can designate the inverse relation, as in

Excellence is exemplified by Dave.

But with the first we cannot: it is not even clear what sentence would purport to express that. The following

Excellent is Dave

does not express something different from what the original sentence expresses, and nothing else comes to mind. In natural language, the inverse of a non-symmetric relation is generally designated via the change in the voice from active to passive or vice-versa. With equivalence relations, instead, only the roles of the arguments get switched: from

Dave is as old as Gabriel

we obtain

Gabriel is as old as Dave,

where the predicate is not in the passive form. The condition on the possibility of building the inverse rules out

Dave is excellent

but it allows us to consider

Dave bought some books

as a sentence in which a relational predicate occurs. For we can in fact build the inverse, i.e.

Some books were bought by Dave.

This further condition seems therefore to give us what we want. Given this, we may try to hold that a predicate designating an *n-place* relation occurs in a sentence iff we can detect *n* open argument positions into which we can quantify *and* we can build a sentence in which we switch the roles of the arguments and the truth-value of the two sentences is the same. But we are unfortunately still in trouble.

Take

Dave weighs 80kgs.

We can obtain

( ) weighs ( )
Dave weighs something,

in accordance with the first condition, and we can also obtain

80kgs is the weight of Dave,

in which the roles of '80kgs' and 'Dave' have arguably changed, so that also the second condition is met. But we would hardly accept that this sentence expresses the holding of a relation. What would the *relata* be? In order to rule these cases out, we can rely on the special connection that relational predicates have with questions and ask the questions to be, so to say, of the right kind.[3] Let us take again our

Dave loves Laura.

If we put a variable in place of one of the arguments, we obtain

x loves Laura;
Dave loves *y*.

We can build the corresponding question, which asks what the missing *relatum* is:

Who loves Laura?
Whom does Dave love?.

Given this relation between relational predicates and questions, we can then rely on the intuitive idea that questions like 'Who?', 'What?', 'Which?' point to something different than what questions like 'How?' point to. In asking whom Dave loves, I am asking who is one of the *relata* in the relation of love. But with

Dave weighs 80kgs,

80kgs is, in fact, not *what*, *who*, *which*, *whom* Dave weighs, but *how much* he weighs. Questions like 'How?' and 'How much?' seem then to point not to one of the *relata*. In fact, 'how' and cognates, but not 'what' and cognates, can be used also for adverbs, as shown by

I read carefully

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[3] Cohen 1929: 354-359 holds that "*Who*, *which*, *what*, *when*, *where*, *why*, etc. are the variables of every-day speech … 'x is mortal', stripped of its text-book disguise, is simply the familiar question, 'What is mortal?'". According to Cohen, therefore, *stripped of its text-book disguise*,

Dave loves *y*

is identical to

Whom does Dave love?.

No matter what *stripped of its text-book disguise* means, in order to accept the requirement put forward in the main text, it is not necessary to embrace Cohen's extreme approach according to which questions are identical to sentences in which free variables occur. For it is sufficient to recognize that relational predicates, sentences in which free variables occur, and questions, are obviously somehow related. On this, see also §4.3.3.

How did you read?,

and it is obvious that 'how' here does not point to something that in the sentence the predicate 'to read' relates to me. In order to rule out cases like

Dave weighs 80kgs,

we can then add the following extra requirement: all the arguments, so to say, answer questions like 'Who?', 'Which?, 'What?', and not 'How?' or 'How (much)?', etc.[4]

Putting everything together, we have the following characterization:

in a sentence an *n*-place relational predicate occurs iff
(RP1) We can detect *n* open argument positions into which we can quantify, and such that each argument answers a question like 'What?', 'Which?', 'Who?';
(RP2) We can build a sentence in which the roles of some of the *n* arguments have been switched, and the truth-value of this and the original sentence is the same.

This is not a definition of when in a sentence a relational predicate occurs, given that there is a pretty obvious circularity: the notion of *role of an argument*, for example, cannot be defined without relying on the notion of relational predicate. Moreover, in order to specify what are the *questions like 'What?', 'Which?', 'Who?'*, the notion of relational predicate would surely be needed. But, however sloppy, however open to counterexamples, and however imprecise it is, I take it still to be a workable characterization that we can employ for our purposes.

1.1.4 THE VALIDITY OF SOME INFERENCES

With this characterization of when in a sentence a relational predicate occurs, let us see whether we can find some good reasons in favour of the thesis that we are primarily interested in, i.e.

[4] Matthews 2007 has recently defended a *measurement account* of propositional attitude attributions, according to which propositional attitude sentences are in fact similar to
Dave weights 80kgs.
In support of his account, Matthews says that for both 'that Cicero is smart' and '80kgs' we can "form *wh*-questions" (150). But while this is certainly the case, the kinds of questions are intuitively very different. Nonetheless, the account I will develop is similar in some crucial respects with Matthews's. In the next chapter, I will hold, together with Matthew, that 'that'-clauses denote something which represents an attitude.

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations.

According to (RP), as it occurs in a sentence like

Olga believes that Cicero is smart

'to believe' designates a relation. The first condition in the characterization just provided, i.e. that an *n*-place relational predicate occurs in a sentence if

(RP1) We can detect *n* open argument positions into which we can quantify, and such that each argument answers a question like 'What?', 'Which?', 'Who?',

is surely satisfied. In our attribution

Olga believes that Cicero is smart

we can detect more than one open argument position,

( ) believes ( ),

and we can quantify into both positions:

Somebody believes that Cicero is smart
Olga believes something.

Moreover, Olga is *who* believes that, while that Cicero is smart is *what* she believes.

Holding that in propositional attitude sentences we have more than one position into which we can substitute an English quantifier makes it easy to account for the validity of some inferences, and the validity of such inferences is actually the reason that is most commonly put forward (Bealer 1982: 23-25; Braun 2015: 144; Crawford 2014; King 2014a: 7; Recanati 2000: 6; 33-39; Richard 1996; Salmon 1983: 5-6; Schiffer 2003: 12-14) in support of the conjunction of the first two theses of the allegedly face-value theory, i.e.

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;
(ST) 'That'-clauses are singular terms.

The inferences whose validity are relevant are those like the following:

Olga believes that Cicero is smart
Gabriel believes everything Olga believes
Thus, Gabriel believes that Cicero is smart.

For according to the conjunction of theses (RP) and (ST), the inference enjoys the following clearly logically valid simple pattern:

$B(oc)$
$\forall x(B(ox) \rightarrow B(gx))$
$\therefore B(gc)$.

Thus, if the theses are endorsed, firstly, the explanation of the validity of the inference does not need to go beyond the usual rules of first order classical logic. Secondly, the quantifiers can be interpreted as the usual objectual quantifiers. But it should be noted that even though often presented as such, these considerations are not really in favour of the conjunction of theses (RP) and (ST), but just of the first. Let us see this with an example that has nothing to do with propositional attitudes. Take the following two inferences

Dave loves Laura
Gabriel loves everything Dave loves
Gabriel loves Laura;

Dave loves a girl
Gabriel loves everything Dave loves
Gabriel loves a girl.

Although the second is more complex, both inferences have a straightforward correct form, and we can account for the validity of both without having to go beyond first order logic with objectual quantifiers (in the case of the second, we would have to add premises, but the argument could still instantiate a valid pattern). So let us go back to our original inference

Olga believes that Cicero is smart
Gabriel believes everything Olga believes
Thus, Gabriel believes that Cicero is smart.

Its validity, and the fact that we want to account for it without going beyond usual first order logic with objectual quantifiers, do not establish whether the inference is similar to the first or the second in our example. Put differently, in order to straightforwardly account for the validity of our inference, the thesis

(ST) 'That'-clauses are singular terms

is not needed. If we reject it and take, for example, 'that Cicero is smart' not as a singular term, but as a quantified phrase similar to 'a girl', everything is still explained in the way we want.[5] Thus the validity of these inferences does not show the truth of (ST), and we will have to discuss it separately below in §1.2. If these inferences are a reason at all, therefore, they are only a reason in favour of

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations.

But is the validity of those inferences a *good* reason in favour of (RP)? Of course, holding (RP), and thus having the possibility of taking the quantifiers as objectual, is not the only way in which the validity of the inference can be explained. Nonetheless, it is clearly the easiest one, in particular considering that, differently from what some have held (Aune 1985: 63-65) the quantifiers occurring in that kind of inference cannot be interpreted substitutionally (Moltmann 2003: 80). A first problem for the substitutional interpretation of quantifiers occurring in the context of propositional attitude attributions is the following (Hofweber forthcoming; Richard 1996/2013: 146-148; Schiffer 1987: 288). Substitutional quantifiers need substitution instances; the following sentence

There are objects of propositional attitudes not expressible in present day English

seems true, but, given what it asserts, the quantifier in it can't be understood as substitutional with sentences of present day English as a substitution class, since any instance would be an expressible object of attitude. But I think it is better not to rely on considerations of this kind. For the substitutionalist can say that the substitution instances belong to English, *suitably*

[5] Obviously,
Dave loves a girl
Gabriel loves everything Dave loves
Gabriel loves a girl
also has another reading, in which Dave and Gabriel do not love the very same girl, but two different girls. This is irrelevant for our purposes. It is the reading we considered in the main text that shows that the validity of the inferences does not support
(ST) 'That'-clauses are singular term.

extended. Richard thinks that this "is cheating" (1996/2013: 147), but even though the notion of suitable extension is surely difficult to cash out, I think it is far from clear that there is some cheating going on in this move. If I am right that the substitutionalist can rely on a suitable extension of English, a sentence like

There are objects of propositional attitudes not expressible in present day English

is problematic for the substitutionalist approach only if there are objects of attitudes that are inexpressible in English, not just *de facto*, but *de jure*. Then, in order to maintain that the quantifiers occurring in something like

Olga believes something

are objectual, one would have to rely on the thesis that there are thoughts that cannot be put into words. This is surely not the easiest way to go.

But there is no need to rely on the *de jure* inexpressible, since there is another problem for the substitutional interpretation of quantifiers like the one occurring in

Olga believes something.

For if these quantifiers were substitutional, the substituents would have to be of the right syntactic category; but this is not necessarily so. Take as an example the following sentence,

Olga imagined something Gabriel never thought about.

If what Olga imagined, and what Gabriel never thought about, is that Cicero is smart, then, according to a substitutional interpretation of the quantifiers, the following

*Olga imagined that Cicero is smart and Gabriel never thought about that Cicero is smart

would have to be grammatical; but it is not. In contrast with a substitutional interpretation of the quantifier, 'something' is acceptable even though it would require a 'that'-clause with respect to 'imagined' but something different with respect to the preposition 'about'.

Since the substitutional interpretation of the quantifiers seems incorrect, if the thesis

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations,

and thus the thesis that the quantifiers are objectual, are denied, then a third type of quantifier should be introduced. This is in fact exactly what Hofweber (forthcoming), Prior (1963: 117-118); Recanati (2000: 33-39), Rumfitt (2003b; forthcoming), Rosefeldt (2008) and Schiffer (1987: 288) suggest. Recanati and Schiffer do not explain how these quantifiers would work and what they mean; but their meaning should be provided. If not, to extend van Inwagen's (1981: 282) protest concerning substitutional quantifiers to the present case, it is like introducing 'to cisse' alongside 'to kiss', and then adding nothing more than that

Dave cissed Laura

is true iff Dave kissed Laura but the sentence does not express what is expressed by

Dave kissed Laura.

Rumfitt (2003b: 462-463) in fact suggests something concerning the meaning of these quantifiers and argues that these quantifiers can "be Englished using the non-nominal quantificational forms 'however things may be' or 'however things may be said or thought to be'". Hofweber (forthcoming) argues instead that these quantifiers concern inferential roles:

> the quantified sentence inferentially relates to quantifier free sentences … we want to inferentially relate the sentence we uttered to any instance of the quantifier. In fact, we are thereby endorsing every instance.

Rosefeldt (2008: 318-325) accounts for them within a type theoretic account.[6] As these authors themselves admit, the way in which they characterize their quantifiers hardly constitutes a full account. Moreover, I think the fact that there are so many different approaches sheds some doubts on our having an intuitive grasp of how these quantifiers would work and thus on how easy defining them properly would be. So, however these quantifiers that are neither objectual nor substitutional are characterized, it seems indisputable that endorsing

[6] Rosefeldt 2008: 310 observes that the quantifiers occurring in
Dave hopes something
Dave said something
cannot be objectual because they cannot be restricted. But, actually, although they allow only a few substitutions, they can in fact be restricted: for example, we can say a truth, an absurdity, and we can hope the impossible.

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations

is a much easier way to explain the validity of some inferences involving propositional attitude sentences. *Other things being equal*, as they say, I think we should conclude that endorsing (RP) is the best explanation.

1.1.5 THE PASSIVE VOICE

As we saw in §1.1.3, an *n*-place relational predicate occurs in a sentence iff

(RP1) We can detect *n* open argument positions into which we can quantify, and such that each argument answers a question like 'What?', 'Which?', 'Who?';
(RP2) We can build a sentence in which the roles of some of the *n* arguments have been switched, and the truth-value of this and the original sentence is the same.

We just saw that the first condition is met by propositional attitude sentences, and we can now see that they also seem to meet the second (Künne 2003: 68-69; White 1972: 80). For from our

Olga believes that Cicero is smart

we can move to the passive voice:

That Cicero is smart is believed by Olga.

Surely, the passive voice is a good strong datum in favour of taking a sentence to be one in which a relational predicate occurs. For in the passive transformation, we change the role of some *relata*, so that the patient(s) becomes the agent(s) and vice versa, and only if a predicate designates a relation among some *relata* do we have some *relata* to change the role of. Thus, it seems that we can easily conclude that in propositional attitude sentences, given that they meet both conditions (RP1) and (RP2), relational predicates occur.

But things are not that easy. For one can deny that propositional attitude sentences really meet condition (RP2) (Harman 2003: 175; Rundle 1979: 280; 313). For example, Rundle holds that

That Cicero is smart is believed by Olga

is not really the passive voice of

Olga believes that Cicero is smart,

but should be taken as the result of an inversion and ellipsis for 'it' in

It is believed by Olga that Cicero is smart,

which is itself tantamount to

It is believed by Olga: Cicero is smart,

where 'it' is a structural device that has no semantic import, as when it occurs in something like

It is raining.

Thus there seem to be other accounts of the alleged passive voice, and so the occurrence of this alleged passive voice is not a proof of the truth of

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations.

But, first of all, explanations of this kind are extremely complicated and unnatural. Moreover, it is not clear that there really is some similarity between

It is believed by Olga
It is raining.

For, as we have already seen, with the first we can ask

What is believed by Olga?

while we cannot ask

What is raining?

Furthermore, the thesis that sentences like

That Cicero is smart is believed by Olga

are only apparently passive voices or, as it is also said, that the 'that'-clauses occurring in them are only in apparent subject position, is often driven by ontological considerations, as in the case of Rundle, or by considerations regarding some general principles of this or that syntactic framework (Moulton 2015). But there is nothing in the sentence itself that rules out the much more intuitive thesis that the *apparent* subject position is in fact a *real* subject position. I think, therefore, that we can rather safely advance the thesis that, again *other things being equal*, sentences like

That Cicero is smart is believed by Olga

are genuine passive voices.

But then propositional attitude sentences satisfy both conditions

(RP1) we can detect *n* open argument positions into which we can quantify, and such that each argument answers a question like 'What?', 'Which?', 'Who?';
(RP2) we can build a sentence in which the roles of some of the *n* arguments have been switched and the truth-value of this and the original sentence is the same.

Thus, *other things being equal*, it seems correct to hold that relational predicates occur in propositional attitude sentences, in accordance with the thesis

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations.[7]

Before moving on to other considerations, let us note that the datum that propositional attitude sentences allow the passive voice does not also imply, together with (RP), the truth of

(ST) 'That'-clauses are singular terms.

[7] Those we saw are not the only data in support of (RP). Others concern extraposition, i.e. the fact that we can move from
Olga believes that Cicero is smart
to
Olga believes it that Cicero is smart.
If 'to believe' was not a relational predicate, then there would be, so to say, no space for 'it'. But I think it is better to leave considerations of this kind out. For these constructions with the expletive 'it' are considered to be syntactically very complex, and too many different syntactic factors would have to be taken into consideration. Luckily, the data we have considered seem already sufficient.

For our ability to construct the passive voice depends merely on whether or not the predicate is transitive, no matter whether or not we have singular terms occurring in the original active sentence. Since 'to love' is a transitive predicate as it occurs in the following sentences,

Dave loves Laura
Dave loves girls
Someone loves Laura
Someone loves girls,

all the sentences allow the passive voice transformation, but only in the first and third is the phrase in object position a singular term.

1.1.6 AN ALLEGED REASON *AGAINST*

Let us take stock. We have seen some reasons that might be taken to support

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations.

We have seen that the so-called *accusative of intentionality* has the weakest possible force: it only shows that some widespread considerations in philosophy of mind and epistemology do not conflict with a relational account of predicates occurring in propositional attitude reports. We then saw that considerations about sentences like

Olga believes the rumour about Cicero

seem to involve some disputable theses, so that they cannot be easily employed as reasons *pro* or *contra* (RP). But we also found two good reasons in favour of taking the predicates occurring in propositional attitude sentences as relational, i.e. the intuitive validity of certain inferences and the grammaticality of sentences like

That Cicero is smart is believed by Olga,

which are best taken as the passive voice counterparts of sentences like

Olga believes that Cicero is smart.

Neither of these considerations, nor their conjunction, constitutes a proof that (RP) is true, since other explanations of the data are available. Endorsing (RP) still seems, *other things being equal*, to be the best option. But, as we will see now, there are some considerations that seem to show that *other things are not equal*.[8] For 'to know' admits of singular terms, as shown by the perfectly grammatical

Olga knows Laura.

Given this, if propositional attitude predicates occurring in propositional attitude sentences are relational, no matter what the semantic function of 'that'-clauses is, if it has been stipulated that 'Bob' is the name of a *relatum* in

Olga knows that Cicero is smart

then one would expect

Olga knows Bob

to be true if

Olga knows that Cicero is smart

is. Take the following example: 'to love' is relational as it occurs in

Dave loves his wife profoundly.

If the sentence is true, and if 'Sweety' has been postulated to be the name of one of the *relata*, it follows that

Dave loves Sweety

is true. But the truth of

[8] These data were firstly presented by Prior 1971: 3-21, Rundle 1979: 293-298 and Vendler 1972: 101. More recently, they have been discussed by Asher 1993: 21-22; 31-32; 210-213; Bach 1997: 224-225; Boër 2009; Harman 2003; Hofweber: 2006: 215-217; King 2007: 137-163; 2014b; Künne 2003: 258-263; McKinsey 1999: 529-531; Merricks 2009; Moffett 2003; Moltmann 2003; Pietroski 2005: 218-241; Pryor 2007; Recanati 2000: 31-33; Rosefeldt 2008; Rundle 2001; Sainsbury 2002: 185-188 and Schiffer 2003: 93-96.

Olga knows that Cicero is smart

does not in fact guarantee that

Olga knows Bob

is true. Olga may know that Cicero is smart, so that the first sentence is true, but not be acquainted with Bob, be it a sentence, a proposition, a fact, Cicero, a property or what have you. Similarly, even if we posit that 'Tom' is the name for one of the *relata*, Olga can fear that Cicero is smart without fearing Tom, so she can fear that Cicero is smart without instantiating an unusual form of *phobia* directed to a proposition, a fact, a sentence, a property or what have you.

Now since we found some good reasons for taking our thesis

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations

to be true, we have good reasons to try to explain the datum away, and there seem to be two main routes one can take here. The first strategy is pure dismissal. Schiffer (2003: 93-96), for example, has quickly dismissed the examples, taking them as just showing a quirk of Indo-European languages. But, firstly, the phenomenon is pervasive: it does not concern only English or 'to know' and 'to fear', but many other languages and predicates as well: 'to demand'; 'to desire'; 'to explain'; 'to expect' ; 'to feel'; 'to hear'; 'to imagine'; 'to indicate'; 'to mention'; 'to recommend'; 'to remember'; 'to request'; 'to see'; 'to suggest'; 'to suspect'; 'to understand' (King 2007: 154; Rosefeldt 2008: 305). Moreover, since the reasons for endorsing our thesis (RP) are themselves linguistic examples, and the thesis is supposed to be a semantic theory exactly of those Indo-European languages, then in the absence of a reason why only some examples would be relevant, I think we have no right to select the data we want to account for. As Cartwright (1962: 102) would have remarked, we cannot simply dismiss some of the data, those that do not fit in our theory:

> a familiar sort of objection … They will claim that this is, somehow, only a point of usage - a linguistic accident which could well be avoided in a language specifically designed for philosophical clarification. But in spite of its familiarity, this objection is not easily understood. One wonders, in the first place, how it could be a mere fact of usage … Usage of what? … And one wonders, in the second place, how to tell those points of usage which are *merely* that from those which are something more.

Furthermore, there is a criterion for establishing whether something is *only a point of usage*, and if we take the criterion as correct, our examples do not come out as mere points of usage. Together with Schnieder (2006), let us imagine a language in which we do not use 'to eat' for princesses, but only use 'to dine'. In that language a sentence like

The princess did not eat

does not express that the princess lacks a certain property and the negation is metalinguistic. The sentence expresses that we do not use 'to eat' for princesses, and in fact we can take it to express something like

"The Princess ate" is not in accordance with usage.

If we take Schnieder's criterion as correct, the examples we are concerned with do not come out as mere points of usage. For let us suppose that Olga knows that Cicero is smart. If it were a mere point of usage that we cannot use a proper name for one of the *relata* in the relation designated by 'to know', then

Olga does not know Bob

would express what

"Olga knows Bob" is not in accordance with usage

expresses. But this is clearly not the case: clearly

Olga knows Bob

does belong to usage, and we would use it, and it would be true, if Olga was in fact acquainted with the object Bob, whatever it is. Furthermore, a test for establishing whether the negation is metalinguistic is the impossibility of morphologically incorporated negation, so that, for example,

Warpe did not wop up his voice, he spoke with an Italian accent

comes out as having metalinguistic tones, considering that

*Warpe unwopped his voice, he spoke with an Italian accent

is ungrammatical (Predelli 2013: 106). While, as Predelli remarks, the test is not conclusive, we can note that our case seems not to pass the test and thus seems to come out as not having a metalinguistic tone. The not identical, but still arguably relevant

Bob is unknown to Olga

is in fact perfectly grammatical.

Thus the data are pervasive, and they do not seem reducible to mere points of usage. They should be accounted for. Let us then move to the second strategy.

The second strategy, which is the most commonly endorsed (King 2007: 153-155; Künne 2003: 259-260; Pietroski 2005: 217-241; Stanley 2011: 64-65), is to hold that some propositional attitude predicates, such as our 'to know', are ambiguous and have different meaning in constructions like

Olga knows that Cicero is smart
Olga knows Bob.

Roughly, the first sentence is taken to express that Olga has a piece of knowledge which is characterised in some way or other by the 'that'-clause, while the second expresses that Olga has Bob as one of the things she is acquainted with. This strategy is clearly successful: if the relations contributed by the predicates are different in the two sentences, it is to be expected that the truth-conditions of the sentences are different. But, as always, we want some reasons for thinking that it is really the case that the predicates are ambiguous. Here are the two reasons that are generally put forward (King 2007: 156-162; Künne 2003: 260).

The first kind of evidence that has been provided is the fact that the predicates pass the usual *zeugma test* for ambiguity. According to the test, since from

Olga knows that Cicero is smart
Olga knows Bob

we cannot move to

Olga knows that Cicero is smart and Bob,

it follows that 'to know' makes different contributions as it occurs in the two original sentences.

The idea behind the test is intuitively correct: for two occurrences of a word or a phrase, we can avoid repeating the word iff it is actually repetition, i.e. iff the two occurrences have the very same meaning. To take Ryle's (1949: 23) famous example, while the tide is rising and hopes are rising, if we do not want to make a pun, we cannot say that both the tide and hopes are rising. Therefore, according to the test, 'to rise' is ambiguous. This seems plausible and pretty clear but, unfortunately, things are not always this clear, and the possibility of deleting one occurrence of a term seems to have to do with many different factors, ambiguity being only one of them. First of all, since from

> Emanuel's dissertation is thought provoking
> Emanuel's dissertation is yellowed with age

we cannot move to

> Emanuel's dissertation is thought provoking and yellowed with age,

the test tells us that 'dissertation' is ambiguous. But when we complicate things just a little bit, as in

> Emanuel's dissertation is *still* thought provoking *although* yellowed with age,

we actually obtain a perfectly grammatical sentence (Lewandowska-Tomaszczyk 2007: 143). Secondly, as van Inwagen (2009: 487) remarks, the acceptability of the conjunction seems to depend on the relations between the conjuncts. Take another of Ryle's examples (1949: 23):

> There exist public opinions and navies.

Surely, this sentence sounds odd. But one may hold that the sentence is odd simply because we do not generally talk about these things together, and it is actually hard to think of any reason why we would ever find ourselves in such a situation. But if one cooks up an appropriate accompanying story, sentences talking about public opinion and the navy can in fact become fine. Here is van Inwagen's example:

> The Prime Minister had a habit of ignoring the existence of things he didn't know how to deal with, such as public opinion and the Navy.

In fact, while

Olga knows that Cicero is smart and Bob,

is odd, the following,

I know Dave and that he loves you,

is fine. These examples do not show that 'to know' is not ambiguous after all. For example, as Boër (2009: 553) remarks, one can explain

I know Dave and that he loves you

by holding that it is a case of *syllepsis*, similar to

She broke her promise and my heart

in which, although the predicate is ambiguous, we can avoid repetition because the two meanings of the predicate are somehow related. But still, the examples show that the zeugma test is not completely reliable, and this reason in favour of taking propositional attitude predicates to be ambiguous is therefore far from conclusive.

The second kind of evidence in favour of the ambiguity of propositional attitude predicates is that they pass the usual *translation test* for ambiguity. The datum is that while in English both

Olga knows that Cicero is smart
Olga knows Bob

are grammatical, in other languages, such as French, German and Italian, two different predicates should be used in the two different kinds of construction. The Italian translations of the two sentences, for example, are

Olga *sa* che Cicerone è intelligente
Olga *conosce* Bob,

in which two distinct predicates occur. Similarly, in German there are 'wissen' and 'kennen' and in French 'connaître' and 'savoir'.

Translation is a traditional test for ambiguity. The idea is that if we translate a word with more than one word in other languages then the original word is ambiguous: why would the other

languages make a distinction out of no difference? Unfortunately, as strong as this may look as a test, it too can be called into question. First of all, one may raise here a general Quinean scepticism concerning the thesis that there is something like *the* translation of a sentence. Moreover, only 'to know' shows such a solid difference in translation in other languages, and, as we have seen, the phenomenon is instead pervasive.

Thus, the reasons usually put forward in the literature are not sufficient in order to support the thesis that some propositional attitude predicates are ambiguous. Should we reject it, then? I think we should not, for two main reasons. First of all, there are cases in which the ambiguity of the predicates is much less controversial. Here is one example. Take a predicate that has nothing to do with propositional attitudes, 'to substitute'. The predicate is clearly ambiguous:

Dave substituted the painting

can express both that Dave substituted something with the painting (*substituens*) or that Dave substituted the painting (*substituendum*) with something. The propositional attitude predicate 'to explain' seems obviously similarly ambiguous: while in

Olga explained that all mathematical truths form a species of logical truth

what follows the predicate has to do with the *explanans,* in

Olga explained logicism,

logicism is the *explandum* (Rundle 1979: 290). If Olga explained that all mathematical truths form a species of logical truth, we can tell Olga that she is wrong. But if Olga explained logicism, she explained what logicism is, without it being necessary that she thinks it is correct. In this case it would be inappropriate to protest that logicism is false, and Olga can well say that she is explaining what the theory amounts to, not that the theory is true. Thus, it seems that we can conclude that at least the propositional attitude predicate 'to explain' is genuinely ambiguous.

Secondly, I think we should recognize that predicates like 'to know' and 'to fear' are already ambiguous before we consider 'that'-clauses, or at least have a complex and multifarious meaning. We do not even need to go into the details of a conceptual analysis of knowledge, for it is sufficient to take a dictionary. Here are some of the different meanings *The Oxford Dictionary* distinguishes for 'to know':

- *To have information*, as in "The cause of the fire is not yet known";
- *To realize*, as in "She knows a bargain when she sees one";
- *To be familiar*, as in "I've known Olga for 31 years";
- *To think that somebody/something is a particular type of person or thing or has particular characteristics* as in "It's known as the most dangerous part of the city";
- *To give name* as in "The drug is commonly known as *Ecstasy*";
- *To distinguish*, as in "We have taught our children to know right from wrong";
- *To experience*, as in "He has known both poverty and wealth".

The same holds for the predicate 'to fear' and all the others that lead to the datum we are concerned about. Take 'to accept': accepting a present or an invitation is not like accepting a conclusion or a theory, unless we are in quite an unusual context in which conclusions are given to us. These are complex predicates and this is to be expected. They concern our mental life and our mental life is indeed complex. Sometimes, moreover, the way in which we phrase things puts constraints on the available meanings. For example, 'some bargain' and 'a bargain' can be read as having the same meaning. But whereas in

I know a bargain when I see it

'to know' can be taken as having the recognition meaning, this is not the case with

I know some bargain.[9]

Since the predicates are at least polysemous even before 'that'-clauses are considered, we can rather safely assume that they are so also when we consider 'that'-clauses and sentences like

Olga knows that Cicero is smart.

Endorsing the thesis that some propositional attitude predicates, such as our 'to know', are ambiguous seems the best strategy in order to save

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations

[9] On the basis of the fact that 'that'-clauses and noun phrases belong to different syntactic categories, King 2007:154 argues that the ambiguity of propositional attitude predicates is best explained by arguing that the syntactic category of the complement of the predicate determines which relation the predicate contributes. But this thesis is subject to some serious objections (Boër 2009: 552-553; Moffett 2003: 82-84; Rosefeldt 2008: 315-316) and, moreover, this sharp correlation between semantics and syntax is actually unmotivated and unnecessary.

from some evidence that seems to show that (RP) cannot be correct. The choice is between rejecting (RP) or endorsing the claim that some predicates are ambiguous. As we have seen, we have some good reasons to take (RP) as true: (RP) is the easiest way to explain the intuitive validity of some inferences and the possibility of obtaining sentences like

That Cicero is smart is believed by Olga,

from sentences like

Olga believes that Cicero is smart.

It is true that we do not have absolutely incontestable arguments for the ambiguity of the predicates. But neither do we have absolute arguments for the univocity of those predicates. Moreover, even though they are weak, some arguments can be put forward in support of ambiguity, arguments that are independent of 'that'-clauses and propositional attitude sentences. I think, therefore, that we should conclude that we seem much more justified in holding that the predicates are ambiguous than in rejecting (RP). All things considered, we can finally conclude that we had better endorse

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations.

1.2 'THAT'-CLAUSES AS SINGULAR TERMS

Theses

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;
(ST) 'That'-clauses are singular terms

are often conflated, and the reasons in favour of (RP) just discussed are usually taken to be reasons for both (RP) and (ST). But, as we saw in §§1.1.4-1.1.5, this is incorrect: both the validity of some inferences and the possibility of building the passive voice leave open the

possibility that 'that'-clauses are not singular terms. Thus we still need to establish whether it is better to endorse (ST). According to (ST), 'that'-clauses are singular terms, but what are *singular terms*? Unfortunately, we notoriously do not have an uncontroversial definition. But, whatever the details are and however the difficult cases are to be accommodated, we can characterize singular terms in the following way. The difference between syntactic units and non-syntactic units is the difference between names, descriptions, predicates on the one hand and something like ' 's reason is', 'and nice', 'gave me while' on the other. Singular terms are, roughly, those syntactic units that purport to denote one thing. Thus, for example, in this sense proper names and definite descriptions are singular terms, in that they purport to denote some thing. Singular terms are therefore a special kind of syntactic unit, and in order to assess (ST) it should first of all be established whether 'that'-clauses are syntactic units. In §1.2.1 we will see that we had better hold that they are. But it will still be open whether 'that'-clauses are singular terms, in accordance with (ST), or whether they are themselves quantified phrases not reducible to singular terms. We will then see in §1.2.2, firstly, that it is in fact better to endorse (ST) and, secondly, that some objections that seems to show that (ST) is false are better explained away.

1.2.1 SYNTACTIC UNITS

Let us start by trying to establish whether 'that'-clauses are syntactic units. As many have remarked and as Künne (2003: 69) puts it, everything in syntax speaks in favour of holding that in carving a sentence like

Olga believes that Cicero is smart

at its syntactic joints, we do obtain 'that Cicero is smart' is a unit. For, in general, there are some constraints on how the passive form of a construction can be built and how we can grammatically rearrange the bits of a sentence. These constraints are predictably connected with the syntactic units that occur in the sentence. For example, in

Olga likes her friends

'her friends' is taken to be a unit because, if it were not, it would be possible to rearrange the different bits so that 'her' and 'friends' get separated; but this is not possible. All the following sentences,

*Her Olga likes friends
*Her are liked by Olga friends

*Are liked friends by Olga her,

are ungrammatical. Cutting

Olga believes that Cicero is smart

so that the 'that'-clause is not a unit violates those constraints. Let us take Prior's account (1963) as an example. According to Prior, we should cut the attribution as follows:

Olga / believes that / Cicero is smart.

Thus 'that Cicero is smart' is not a unit, while 'believes that' is. But then why *can* 'believes' and 'that' be kept apart, as shown by the grammaticality of

That Cicero is smart is believed by Olga
What Olga believes is that Cicero is smart,

and actually *should* be so kept apart, considering that both the following sentences,

*Cicero is smart is believed that by Olga
*What Olga believes that is Cicero is smart,

are ungrammatical?[10]

Surely, as always, these problems for accounts that do not take 'that'-clauses to be syntactic units are not without replies. For example, it should be recognized that in our natural languages there are cases in which bits of languages which are undoubtedly syntactic units can be kept apart. For example, we have the phenomenon of *tmesis*, in which, as Quine (1987: 3) puts it, there is the sandwiching of one word in another. As he reports, tmesis is actually possible in English: in

[10] If we cut our sentence as
Olga / believes / that. Cicero is smart
as suggested by Davidson 1968: 138-140, the 'that'-clause would have to be separable, but it is not. If we cut as
Olga / believes that Cicero is smart,
as Quine 1960: 216 and McKinsey 1999: 526-529 have suggested, then it becomes a mystery why we can we have something like
Olga believes that Cicero is smart and that the *Somnium Scipionis* is amazing.
If we cut it as
Olga / believes / that Cicero / is / smart
as in accordance with Russell 1910 and, more recently, Moltmann 2003, then it becomes a mystery why we can obtain
Gabriel believes it.

A whole nother ball game,

for example, 'another' is sandwiched with 'whole'. Moreover, while in English the phenomenon is pretty rare, it is pervasive in some other languages, such as German, where it concerns all the aptly called *separable verbs*: the verb 'aufmachen', for example, typically gets split in some constructions, such as the following

Machen Sie die Tür auf.

With tmesis we have a counterexample to the thesis that syntactic units cannot be rearranged so as to get separated. Data on separability alone, therefore, do not seem able to settle the question of whether 'that'-clauses are syntactic units. But it should also be recognized that the phenomenon of tmesis is probably best taken as an exception, not as the rule, so that unless we were confronted with serious reasons for why we should not take 'that'-clauses to be syntactic units, it is better to think they are. Moreover, data on separability are not the only kinds of data we can rely on in assessing whether 'that'-clauses are syntactic units. Another datum that is relevant here is that, for example, we can substitute *singular* pronouns and demonstratives, as in

Olga believes it
Olga believes that,

and we can say that both Olga and Gabriel know the same thing, not the very same *things*. Certainly these are not conclusive data; but it is also the case that from

Olga believes that Cicero is smart,

we can obtain

Olga believes something, namely that Cicero is smart
Olga believes something, i.e. that Cicero is smart.

Since there *is* something Olga believes, it really seems that the quantifier is *singular*. Furthermore, the quantifier seems singular, even forgetting about the fact that the predicate goes in the singular. Some have suggested that, forgetting about natural language, the quantifier would in the end be best analysed as plural. Recently, for example, Jubein (2001:57) has held the following:

> Let's call the entities that stand in propositional attitude relations with agents propositional *relata* (taking care not to understand this as presupposing propositions) … Then the natural idea is to replace apparent quantification over propositions with quantification over propositional *relata* … The solution to this problem involves "plural" quantification, a phenomenon that is common in ordinary English but relatively unexplored in logic.

But those sentences enter in inferences like those we have seen in §1.1.4, and, as Crawford (2014: 183-187) has shown, it does not seem that the validity of those inferences can be accounted for in terms of plural quantifiers. Let us take the following valid argument,

> Olga believes that Dave admires Laura
> Gabriel believes everything Olga does
> So, Gabriel believes that Dave admires Laura.

If the quantifier is plural, then the second premise in the argument might be taken to have the following form (where *xx* stand for plural variables bound by a plural quantifier):

> $\forall xx[(BEL(o, xx) \rightarrow BEL(g, xx)]$.

But from it and

> Olga believes that Dave admires Laura

it does not follow that Gabriel believes that Dave admires Laura: Olga and Gabriel might be related to the same *relata*, as in accordance with the second premise, and Olga might believe that Dave admires Laura, as in accordance with the first premise, but there is still space for it not to be the case that Gabriel believes that Dave admires Laura. For the second premise does not ask Gabriel to be related to the *relata* in the same way in which Olga is related, and therefore it can be that Gabriel believes that Laura admires Dave, without it being the case that he believes that Dave admires Laura back. One may try to put this constraint on order into the argument, so that the second premise become analogous to

> For any propositional *relata*, if Olga stands in the belief relation to them in any specific way, then so does Gabriel,

as Jubien in fact suggests (2001: 57). But, firstly, even though we might be able to construe a *logic* of plurals in which we can take care of order, by following the path initiated by Taylor and

Hazen (1992: 389-390), and thus find a way to specify the *connexions* between the constituents, this is not how the *natural language* of plurals work. For example, suppose Laura says

> My first, second, and third choices are daffodils, pizza, and gnomes.

While her sentence might suggest that her first choice is daffodils, it does not seem that this belongs to what the sentence expresses. For example, she can in fact add:

> Now guess which is my first choice,

and if she wanted to tell us this in the first place she would probably add 'in this order' or 'respectively', as we tend to do in these cases. Secondly, as Crawford observes, even forgetting about natural language, adding order is not going to make the inference valid. For in

> For any propositional *relata*, if Olga stands in the belief relation to them in any specific way, then so does Gabriel,

we are quantifying over *specific ways* of being related to *relata*; but no reference to a way of believing is present in the first premise

> Olga believes that Dave admires Laura

or in the conclusion

> Gabriel believes that Dave admires Laura

so that the argument does not have the form

A
$A \rightarrow B$
$\therefore B$

which would make it valid.

Thus, given the validity of the inferences in which sentences like

> Olga believes something

Gabriel believes everything Olga believes

occur, the quantifiers occurring in those sentences are best taken to be singular, and not just because of some superficial reasons, such as the fact that the predicate goes in the singular. But if the quantifiers are singular, then 'that'-clauses are syntactic units. From this, and also in consideration of the fact that 'that'-clauses respect the syntactic constraints seen above, we can conclude that 'that'-clauses are best taken to be syntactic units.

1.2.2 SINGULAR TERMS

Putting everything together, 'that'-clauses are syntactic units in a position open to English singular objectual quantifiers. But this still does not show that

(ST) 'That'-clauses are singular terms

is true, because it is still open whether 'that'-clauses are singular terms. For it is still open whether they are, in accordance with (ST), syntactic units purporting to denote one thing, as proper names and definite descriptions are, or whether they are themselves quantified phrases not reducible to singular terms, as, for example, 'a girl' as it occurs in

A girl is loved by Dave

is. In fact, Shier (1996), Bach (1997) and Recanati (2004) have all suggested that we should account for 'that'-clauses by taking them to be existentially quantified phrases. According to Shier (1996: 227), 'that Cicero is smart', as it occurs in

Olga believes that Cicero is smart,

is an

> existential quantification over what might be called the "finer-grained versions" of the proposition encoded by the embedded sentence. The idea is that a belief ascription with a directly referential term in small scope is used to *characterize*, though not to *specify*, the content of the belief.

Bach (1997: 227) holds instead that in

Olga believes that Cicero is smart

the 'that'-clause does not specify which sort of that-Cicero-is-smart belief she has, though Bach leaves it open how this is to be developed. According to Recanati, the 'that'-clause should be taken as meaning what 'something that is true iff Cicero is smart' means (2004: 231). While he does not provide us with reasons why we should accept his account, he asks us "Why not?" (2004: 231). Now, apart from the specific problems with these accounts,[11] I think that the question is somehow misplaced. 'That'-clauses do not seem to be quantified phrases. For if that were the case, they would behave like other quantified phrases, which they do not. In particular, it would be possible to make sense of the substitution of more complex existentially quantified phrases or of the universal quantifier for the existential quantifier. Let us take

Dave loves a girl.

It may well be false that Dave loves all girls, or that he loves exactly 6 girls, but we can still make perfect sense of it. With 'that'-clauses the situation is rather different. Let us take again

Olga believes that Cicero is smart.

I cannot make sense of the substitution of the universal quantifier for the existential quantifier. What would it mean that Olga believes every Cicero is smart? At all times, in any way? One could propose that what Olga believes in this case are all sentences that are true iff Cicero is smart. This move seems desperate. And consider 'to hope': what is it for Olga to hope all Cicero is smart? The only thing that comes to mind is that she simply hopes that Cicero is smart. But then why not take 'that Cicero is smart' as simply a singular term for a singular entity? Thus we seem more justified in questioning the claim that 'that'-clauses are quantified phrases not reducible to singular terms, than in questioning the claim that they are reducible to singular terms. Only if the alternative of taking them to be singular terms failed would we be justified in considering the quantificational option, and I think that taking 'that'-clauses to be singular terms does not in fact fail. It is true that there are two kinds of considerations that seem to show that

(ST) 'That'-clauses are singular terms

cannot be correct, but, as we will now see, they can be easily rejected.

[11] For Shier's account, I think the main issue is that it is not obvious what it means to say that propositions come in *versions*. As for Recanati, according to his account I believe that Cicero is smart iff I believe something that is true iff Cicero is smart. But then for the attribution to be true, if Cicero is smart (not smart), it is sufficient for me to believe something true (false). Thus if Cicero is smart, I believe that Cicero is smart because I believe that snow is white. This cannot be correct.

The first consideration is that 'that'-clauses seem unable to grammatically flank the identity sign, given that

That Cicero is smart is that Tully is smart

is odd (Hossack 2011: 150; Moltmann 2015; Mulligan 2010: 572-573). But, first of all, as Hofweber (2006: 216-217) remarks, the grammaticality of a sentence depends also on merely syntactic factors. So it is not clear why we should take a consideration on grammaticality as able to show that 'that'-clauses do not purport to denote some thing, i.e. as able to show something about the semantic characteristics of 'that'-clauses. Thus, for example, as many have remarked (Boër 2009: 550; Geach 1972: 168-9; King 2007: 142), arguments from lack of substitutivity *salva congruitate* cannot in general work against the semantic thesis that 'that'-clauses are singular terms. Even if 'Bob' is the name of one of the *relata* in

Dave hopes that Laura is adorable,

it should be recognized that

*Dave hopes Bob

is ungrammatical. Thus Rosefeld (2008: 306-309) and Sainsbury (2002: 185-188) have, for example, concluded that 'to hope' is not relational and 'that'-clauses do not denote a *relatum*. But simply because two terms denote the same object does not mean that they have the same syntactic features, and syntactic features are relevant when it comes to grammaticality.

When it comes to identity, however, the considerations on grammaticality can be strengthened. Frege famously held that identity is special, in that it is the criterion for singular terms.[12] If Frege is right, with identity the gap between syntax and semantics is bridged, and the ungrammaticality of identity sentences would then be able to threaten

(ST) 'That'-clauses are singular terms.

But, first of all, there are endless counterexamples to Frege's thesis that identity is the sign of singular terms. As Oliver (2005: 184) notes, for example,

[12] Relying on his distinction between objects and concepts, and on the thesis that singular terms mean objects while predicates mean concepts, in 1884/1953 Frege says: "Now for every object there is one type of sentence which must have sense, namely the recognition statement" (116). In 1892-1895/1979 he repeats: "[T]he relation of equality, by which I understand complete coincidence, identity, can only be thought of as holding between objects, not concepts" (120).

*Cicero is I

is not grammatical, and even though

Being smart is the property of being smart

is fine, the following is not:

*The property of being smart is being smart.

Moreover, as we have already seen in §1.1.2, it is not obvious that 'is' is the English predicate for identity, and 'that'-clauses seem perfectly able to occur grammatically in sentences in which identity is asserted, such as

That Cicero is smart is nothing but that Tully is smart.

Finally, it is not obvious that

That Cicero is smart is that Tully is smart

is ungrammatical. While I think it should be recognized that we would hardly use that sentence, it is not difficult to imagine a scenario in which we would probably be happy to employ it.[13] For example, let us suppose that with a friend we engaged in the enterprise of counting facts. Our friend says that we have the fact that Cicero is smart and then the fact that Tully is smart. If we disagree we can shout:

That Cicero is smart is (just) that Tully is smart, do not double-count!

Thus the first kind of consideration against

[13] Why would we hardly use those identity statements? According to the account I will develop in the next chapters, 'that'-clauses denote sentences that should be taken to represent something. If we have the *representatum*, as in

The fact that Cicero is smart is the fact that Tully is smart,

then no problem arise. On my account, we would hardly use the identity statement in which only 'that'-clauses occur because it does not help much to speak about a *representans* without any additional bit that can help us understand what the *representatum* might be. Moreover, on the account I will develop, the fact that

That Cicero is smart is true

is fine, even though the subject is a mere 'that'-clause, can be explained by holding that the predicate provides us, so to say, with enough information on what the *representatum* could be. On phrases like 'the fact that Cicero is smart' see also §2.1.1.

(ST) 'That'-clauses are singular terms

does not seem correct. Let us then move to the second.

The second consideration regards the so-called *inferential tests for singular terms*. The tests were suggested first by Dummett (1981: 59-69), and then others, most recently Hale (2013: 40-46), on the basis of the idea that in order to identify singular terms, it is sufficient to consider their behaviour *within language*, without having to talk about the bits of the *world* they are somehow related to. Here is a version of the classic inferential tests (Hale: 2013: 42-43):

'*a*' functions as a singular term in a given sentence 'A(*a*)' iff
I. It shall be possible to infer the result of replacing '*a*' by 'it' and prefixing the whole by 'There is something such that …';
II. For some sentence 'B(*a*)' it shall be possible to infer from 'A(*a*)' and 'B(*a*)' 'There is something such that A(it) and B(it)';
III. For some sentence 'B(*a*)', the inference is valid from 'It is true of *a* that A(it) or B(it)' to the disjunction 'A(*a*) or B(*a*)'.

The consideration that can be derived by the tests against

(ST) 'That'-clauses are singular terms

is that 'that'-clauses do not actually pass the tests smoothly. In particular, test III cannot even be applied, since the premise needed to apply the test is ungrammatical: nothing of the form

It is true of that Cicero is smart that A(it) or B(it)

is grammatical.

What are we to say about this? These tests can and have been criticised on many different grounds (Rumfitt 2003a: 197-207), but we do not need to enter into the details of all the different issues. For Hofweber's remarks are relevant also here: why should an ungrammaticality show something about the meaning of 'that'-clauses? In fact, Hale (2013: 42) himself holds that this is not the way in which we should interpret the tests, so we should not fuss about the grammatical details. But in that case 'that'-clauses pass the tests. Let us take

Olga believes that Cicero is smart
Gabriel said that Cicero is smart.

Clearly,

I. We can obtain "There is something such that Olga believes it";
II. We can obtain "There is something such that Olga believes it and Gabriel said it";
III. The inference is valid from "It is true of that Cicero is smart that Olga believes it or Gabriele said it" to the disjunction "Olga believes that Cicero is smart or Gabriel said that Cicero is smart".[14]

Thus, like the first consideration seen above, neither does this second consideration seem able to threaten

(ST) 'That'-clauses are singular terms.

Moreover, the inferential tests seem instead to threaten the thesis that 'that'-clauses are quantified phrases not reducible to singular terms. In fact, the tests were developed exactly in order to exclude quantifiers and quantified phrases from the category of singular terms. Singular terms have a uniqueness, an identifying flavour, since they purport to denote exactly one thing. This is not the case with the quantifiers not reducible to singular terms. Let us take a not too controversial intuitive case of singular term, i.e. the proper name 'Cicero' as it occurs in

Cicero is smart.

In accordance with test II, from sentences like

Cicero is smart
Cicero is wise

we can infer something like

There is something such that he/she/it is smart and wise.

This is not the case with the quantifiers, and the test is in fact able to rule 'something' and cognates out: we have no guarantee that from

[14] Dummett 1981: 63-64 and Hale 2013: 43-44 add also another test which is more difficult to state easily. The idea, anyway, is the old Aristotelian thesis that a quality has a contrary but a substance does not. Put differently, the idea is that for any predicate there is another predicate which is true of all and only those objects of which the original predicate is false. But it is not the case that for any term that denotes an object, there is another denoting something else of which just those predicates are true which are false of the original object, and conversely. 'That'-clauses pass this test, in that 'that Cicero is smart' is not the contrary of 'that Cicero is not smart', and in fact they are both contingent.

Somebody is smart
Somebody is wise

we can infer something like

There is somebody such that she/he is smart and wise.

Thus, if 'that'-clauses were quantificational and not reducible to singular terms, they would fail test II, but they do not: as we have already seen, from

Olga believes that Cicero is smart
Gabriel said that Cicero is smart

we can obtain

There is something such that Olga believes it and Gabriel said it.[15]

The only way in which the derivation would be valid on the quantificational account is if the existentially quantified phrase has a uniqueness clause and is therefore a definite description. But this means that 'that'-clauses are in fact singular terms, as syntactic units that purport to denote some thing. Thus the quantificational account is in accordance with the fact that 'that'-clauses pass the tests only if it is taken to be not an alternative, but actually a version of

(ST) 'That'-clauses are singular terms.

Again, the tests can be criticised on several possible grounds, so that they surely do not prove that a quantificational account according to which 'that'-clauses are not reducible to singular terms is false. Still, we really miss a reason why we should take such an account to be true. We do not have reasons to think that (ST) fails, and 'that'-clauses do not behave like quantified phrases that are not reducible to singular terms. I think that we can finally conclude that an account that endorses (ST) is to be favoured.

[15] On this, see also §2.1.2.

CONCLUSION

The so-called *face-value* theory of propositional attitude sentences, i.e.

> (THE ALLEGEDLY FACE-VALUE THEORY)
> (RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;
> (ST) 'That'-clauses are singular terms;
> (P) 'That'-clauses denote propositions,

is often endorsed without even discussing the plausibility of its tenets. As Schiffer (2003: 11) holds, the theory is "the default theory that must be defeated if it's not to be accepted" and in fact he himself spends but a handful of lines discussing it. Surely, it is the default theory, considering that it originated more or less two thousand years ago, and since then in philosophy it has mostly been taken for granted (Boh 1993). But this does not make it necessarily true, and all alternative theories *must be defeated if they are not to be accepted*. In this chapter, I have tried to defeat the alternatives for what is at stake with theses (RP) and (ST). As we have seen, we cannot prove that the theses are true and that the alternatives necessarily fail, but all the different data that need to be accounted for can be more elegantly and more easily explained if the two theses are endorsed. Thus there really is something face-value in these theses, and an account that endorses them is to be preferred to the alternatives.

If (RP) and (ST) are true, 'that'-clauses denote one of the *relata* of the relation designated by a predicate occurring in a propositional attitude sentence. But what is this *relatum*? This is the topic of the next chapter.

2
SENTENTIALISM

As we saw in Chapter 1, it seems we had better endorse the thesis

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations.

Thus, for example, it seems we had better hold that 'to believe', as it occurs in

Olga believes that Cicero is smart,

designates a relation. In Chapter 1 we also concluded that, even though we do not have conclusive reasons for it, we should favour an account according to which

(ST) 'That'-clauses are singular terms

is true. If 'that'-clauses are singular terms, then it is a quite uncontroversial move to hold that the 'that'-clause provides us with the second *relatum* in

Olga believes that Cicero is smart.

But what kind of object is this second *relatum*? It is generally agreed that we should go *propositionalist*, i.e. that we should hold that the that-clause 'that Cicero is smart' purports to denote a proposition. Thus, although no agreement has been reached on what propositions are, theses (RP) and (ST) are generally combined with

(P) 'That'-clauses denote propositions.

As we have already seen, together the three theses constitute the so-called *face-value theory* of propositional attitude sentences.

Now thesis (P) might be taken both as a non-substantive or as a substantive thesis (Crawford 2014: 205-208). For example, Richard (1990, p. 7) suggests we use 'proposition' neutrally to simply designate whatever 'that'-clauses in attitude ascriptions denote. But here we will be concerned with the substantive version of the thesis, i.e. we will be concerned with (P) as a thesis about what kind of things we are related to when propositional attitude sentences are true, and not just about how to name such *relata*. Traditionally, propositions are taken to be abstract: they are taken to have no spatial location, nor anything else that can make them a physical object. Secondly, they are traditionally considered to be mind- and language-independent, in two senses: first, their existence is taken to be independent of the existence of thinkers or speakers, and, second, it is taken to be possible to express the same proposition in just about any natural language. Thirdly, propositions are taken to have truth-conditions (Schiffer 2008: 267-269). Recently, some have argued that propositions do not have all these characteristics that are traditionally attributed to them. Some, for example, have held that propositions really are (types of) acts of mental predication and are therefore mind-dependent (Burge 2007; Hanks 2011; Soames 2010). Moreover, King (2007: 136) has suggested that propositions are not just mind-dependent, but also somehow language-dependent. But even though in different accounts propositions have different characteristics, propositions are agreed to be not reducible to sentences. To use Schiffer's way of putting this (2003: 47), for whatever content is, sentences are entities that *have* a content, and thus are not propositions, in that propositions are entities that *are* contents. Thus the alleged face-value theory is to be contrasted with the following account, which is usually called *sententialism*:

SENTENTIALISM

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;

(ST) 'That'-clauses are singular terms;

(S) 'That'-clauses denote sentences.

Propositionalism actually finds support in a general dissatisfaction with sententialism, and the purpose of this chapter is to develop a sententialist account so as to establish whether propositionalism is really the only viable option when it comes to accounting for propositional attitude sentences.

According to sententialism, as it occurs in

Olga believes that Cicero is smart

'that Cicero is smart' denotes the very sentence "Cicero is smart". Thus in developing a sententialist account, we should start by understanding what it means to have an attitude to a sentence. We will see that according to the account I will develop, Olga believes that Cicero is smart, i.e. she is related to the sentence "Cicero is smart", if two other relations hold: firstly, a relation between Olga and what she believes and, secondly, a relation between this belief and the sentence "Cicero is smart". Put in a more friendly and fruitful way, according to the account Olga believes the sentence "Cicero is smart" if she believes something which we can represent with the sentence "Cicero is smart" (§2.1.1). What is this some thing Olga believes? As we will see in §2.1.2, sententialists can and should stay neutral on this question.

But sententialists cannot stay neutral on another question, i.e. the question of when it is the case that a sentence can represent an attitude. We will see some features that something needs to have in order to represent something else. As I will show, those features are what sententialists can rely on in accounting for propositional attitude sentences and in solving (or dissolving) the notorious puzzles of propositional attitudes, i.e. Frege's and Kripke's puzzles. In particular, we will see that sententialists can hold that even if a sentence expresses exactly what another sentence does, the two can nonetheless be different as to their representational aptness (§2.2).

According to sententialism, 'that'-clauses denote sentences. But what are sentences? I will show that sententialism needs to put some constraints on what a sentence is (§2.3).

I will conclude that, for the data considered in this chapter, sententialism seems indeed to be a viable alternative to propositionalism as an account of propositional attitude sentences.

Sententialism is generally, though, considered doomed. At the end of this chapter, we will have seen that some of the considerations on the basis of which it is so considered are due to a misunderstanding of what sententialism is – as we will see, for example, differently from what some have thought, it is not a mind- or intentions-free account. However, we will still have to discuss the main reasons why sententialism is usually simply discarded, i.e. the famous Church translation argument and a problem raised by Schiffer. We will consider these allegedly fatal objections in the next chapter.

2.1 ATTITUDES TO SENTENCES

According to the account we will now start developing, i.e.

> SENTENTIALISM
> (RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;
> (ST) 'That'-clauses are singular terms;
> (S) 'That'-clauses denote sentences,

the 'that'-clause 'that Cicero is smart', as it occurs in

> Olga believes that Cicero is smart,

denotes the sentence "Cicero is smart". Since, moreover, according to the account the predicate 'to believe' designates a relation, it follows that according to sententialism the attribution expresses that Olga is related to the sentence "Cicero is smart". But this is far from a fully developed account, and we will start by establishing what it means to be attitudinally related to a sentence. As we will see, I will suggest that the most promising way to develop the account is to hold that we are related to a sentence if we have an attitude toward something that can be *represented* by that sentence (§2.1.1). But what is this something? As we will see in §2.1.2, sententialists actually can and should stay neutral on this issue.

2.1.1 TWO RELATIONS AND A DISPLAYED *RELATUM*

What does it mean to be attitudinally related to a sentence? Different sententialist accounts differ exactly on how they answer this question, and there are three main options.

The first is the one suggested by Carnap (1947: 62), according to which, roughly, Olga believes that Cicero is smart, i.e. stands in a relation of belief to the sentence "Cicero is smart", iff she is disposed to an affirmative response to "Is Cicero smart?" or to a translation of this sentence that she understands. But this first option can hardly do. First of all, we have what we can call *the toddlers and puppies objection* (Marcus 1993: 242-243): my cat believes that I am her feeder, but she is surely not going to be disposed to say 'yes' or to nod when I ask her whether I am her feeder. Secondly, problems also arise when we limit our considerations to those subjects for which an affirmative response would make sense, and this even if we accept a dispositional account of the attitudes. For sententialism would then assign to linguistic behaviour a privileged

position in comparison to all the other dispositions of a subject, and this hardly seems justifiable. There are in fact plenty of cases in which, if we embrace a dispositional account of attitudes, we would intuitively count somebody as having a certain attitude, even though that subject would not provide an affirmative response if asked the corresponding question. As Carnap himself recognized a few years later, when he abandoned behaviourism, a subject might be confused (1954: 129), and there may be many other reasons why the subject would refrain from an affirmative response. We may even leave aside cases of lack of understanding of the question, insincerity, irony, etc., and the issue that the requirement of sincerity creates a form of circularity – you believe that *p* if you are disposed to provide a *sincere* affirmative response to "*p*?", i.e. if you respond in accordance with what you believe (Chisholm 1955-1956: 141-142). We may leave these issues aside because a subject, having a certain attitude, might refrain from an affirmative response simply because she is not fully conscious of her beliefs (Marcus 1993: 242-245). Take the following quite convincing example (Schwitzgebel 2013: 81-82):

> Compare, now, the attitude of believing that one is God's gift to women. A man who believes this might not be disposed to say to himself, "I am God's gift to women", but he will presumably take for granted his attractiveness to women. He will tend to hold himself with a certain sexual arrogance. He will expect his advances to be favorably received. When his advances are rebuffed he will be prone probably not to surprise (which might render the dispositional structure unstable by correcting him in the long run) but rather to rationalization or quick forgetting ... The man might be an atheist who in some sense could not literally believe he is God's gift to anyone – and yet there is some belief-like attitude attributed through this fanciful language, an attitude that is probably not precisely captured by any more literal-seeming attributions like "he believes that most women are attracted to him" or "he believes that women are lucky to receive his sexual attention".

And while with belief it might well be disputed that we are not aware of all our beliefs, by contrast it seems indisputable that there are many things we may fear and desire without being fully aware of them, so that we would refuse an affirmative response if asked. If we accept dispositionalism, the intricate net of a subject's dispostions could make us willing to say that she fears something, even though she is not disposed to an affirmative response to the corresponding question. Thus linguistic behaviour does not seem to have a privileged role with respect to the overall attitudes. It follows that it is better not to understand sententialism as holding that you believe that *p* iff you are disposed to an affirmative response to "*P*?".

The second option is to hold that Olga believes that Cicero is smart, i.e. stands in a relation of belief to the sentence "Cicero is smart", iff she believes the sentence to be true.[16] But this option

[16] Quine 1956: 185 suggests employing the predicate *to-believe-true*, so he might be taken to have advanced this second option. But it is not obvious that *to-believe-true* is to be taken as tantamount to *to believe to be true*, and there are in fact reasons to doubt this. Salmon 1995/2007: 265, for example, holds: "Believing-true, for Quine, is evidently a relation that a subject bears to a sentence by virtue of a certain kind of match

also can hardly do, since there is the following obvious issue: if Olga is a monolingual speaker of Italian, she can believe the English sentence "Cicero is smart" to be true, for example because a bilingual friend she trusts told her so, so that

Olga believes "Cicero is smart" to be true

is true, without believing that Cicero is smart, for example because she has never heard of Cicero.

Finally, the third option is to hold, broadly together with Davidson (1968: 140), Higginbotham (2006: 102-103) and Matthews (2007: 223),[17] that to have an attitude to a sentence is to be related to something which is somehow related to the sentence. This third of the three possible options seems the best one, in that it does not incur obvious problems. But what does it amount to, exactly, i.e. what exactly is the relation that holds between our attitude and the sentence? When we say that Olga believes that Cicero is smart, we are trying to *represent* her mental life. In representing something, we use the resources we have. Take a map. We could represent London's Underground by drawing a map of it. In this case, our representational tools are lines of different colours and names of different stops in a 2-D space. Or take fruits. We can represent their shapes by using, as tools, regular polygons in a 2-D space. Among our representational tools is our own language, and we can therefore hold that just as we employ geometrical shapes in order to represent the shapes of fruits, so we denote sentences to represent attitudes.

I think, therefore, that sententialism is best developed as follows: according to sententialism, in uttering

Olga believes that Cicero is smart

we denote "Cicero is smart" in order to represent a belief of Olga:

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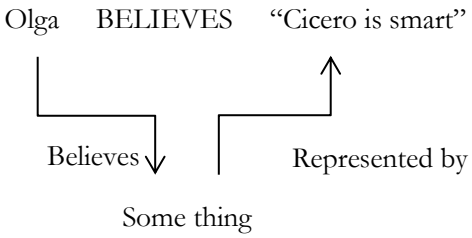
between the subject's psychological state and some ontologically thrifty feature of the sentence – perhaps its associated assent-producing and dissent-producing stimuli (in Quine's jargon, its stimulus meaning) or its conventional use in communication, where this is taken as not involving the assignment of a proposition as semantic content ... believing-true, for Quine, is about as semantical as True Value Hardware Stores or *The Plain Truth* magazine. It is semantical in name only". In fact, as Salmon notes, '-true' drops out completely from the later Quine 1977, at the passages in which Quine again discusses sententialism.

[17] For this *broadly*, see below, §2.2.1.



Sententialism is sometimes described as the account according to which propositional attitude sentences are to be taken as on a par with direct speech reports. While maintaining that *nothing could be more misleading and erroneous* than sententialism, Prior (1971: 61) for example characterizes sententialism as the thesis that we should

> treat sentences containing … other sentences in quotation marks as a paradigm case to which the things that we are really interested in (thinking that, fearing that, bringing it about that) should be assimilated.

But we can now see that this is a misleading characterization. If we take quotation marks to be devices of pure mention, i.e. if we take a sentence within quotation marks to simply denote the sentence itself, it is true that according to sententialists,

> that Cicero is smart
> the sentence "Cicero is smart"
> "Cicero is smart"

are co-denotational. But this does not mean that sententialists are forced to hold that

> Olga said: "Cicero is smart"
> Olga said that Cicero is smart

express exactly the same thing. It is true that if the predicate contributed the same relation in both, the two reports would express the same thing; but, as we already know from §1.1.6, there are independent reasons to think that the predicate does not in fact designate the same relation in both. In fact, there are some data that concern specifically 'to say' that seem to show that it is ambiguous. For

> Olga said "Cicero is smart" and that snow is white,

in which the predicate is followed by complements of different kinds, is odd. For the reasons we have already seen, I do not think we should be too impressed by data like this. Just to quickly remind ourselves why, take the following two sentences:

Olga knows Emanuel
Olga knows that Cicero is smart.

The following,

Olga knows Emanuel and that Cicero is smart

is odd. But at the same time

Olga knows Emanuel and that he loves her

is fine. Thus there seem to be different reasons why the zeugma is allowed, and so it is better not to take the oddness of some sentences as a proof of some thesis or other. Still, we do not have obvious data against the thesis that 'to say' is ambiguous, and thus it does not seem that sententialism can be criticised because 'to say' comes out ambiguous in the way seen. If, as it seems, the predicate 'to say' does not contribute the same relation in

Olga said: "Cicero is smart"
Olga said that Cicero is smart,

then sententialists can hold, as is intuitively correct, that the first is true iff Olga uttered the very sentence "Cicero is smart", while for the second to be true it is not necessary that Olga uttered those very words, it being sufficient that she put into words something that could be also put as "Cicero is smart" or, to put it differently, something that can be represented by "Cicero is smart".[18]

Incidentally, we can now already note some differences between sententialism and propositionalism. First of all, propositionalists take only some of the predicates to be ambiguous, since

that Cicero is smart
the proposition that Cicero is smart

[18] For the difference in the behaviour of indexicals in direct and indirect speech reports, see §3.4.2.

are, according to propositionalism, co-denotational, and

Olga believes that Cicero is smart
Olga believes the proposition that Cicero is smart

have the same truth-conditions. Sententialists, by contrast, take all the predicates to be ambiguous, since there is no predicate such that something of the form *the sentence "p"* can be substituted for something of the form *that p* with preservation of truth-conditions.[19] This seems to be an advantage for sententialism over propositionalism. For the different propositional attitude predicates seem to behave in similar ways, and thus it seems that either they are all ambiguous, or none is. Secondly, according to sententialists

Olga believes that Cicero is smart
Olga believes the proposition that Cicero is smart,

is not a case of substitutivity of co-denotational terms: in the first sentence we are denoting a sentence, in the second a proposition. So why is it that they share their truth-conditions? Sententialists can here hold that this is guaranteed in the same way in which what

Olga believes Cicero

expresses guarantees that

Olga believes that Cicero is sincere

is true: when Olga believes Cicero, she believes (perhaps among other things) that he is sincere. Similarly, when Olga believes a proposition, she believes that the proposition is true. Since the proposition says that Cicero is smart, when Olga believes the proposition she believes that it is true that Cicero is smart, i.e. that Cicero is smart.[20] Moreover, there is another difference with

[19] Prior 1971: 14-15, when discussing the substitutivity issue that we considered in §1.1.6, explicitly talks about the substitution of something of the form *that p* with something of the form *the sentence 'p'*: "A man might perhaps in some odd mood or condition fear sentences as he fears dogs – if Robinson Crusoe had seen not a footstep but the inscription 'The cat is on the mat' written in the sand, it might have set him trembling – but this is quite a different matter; such a man might fear the sentence without knowing what it means; and even if he did, he might fear the sentence 'The cat is on the mat' without fearing that the cat is on the mat".

[20] Sententialism is a theory of 'that'-clauses, so that it does not necessarily lead to a particular theory of phrases like 'the proposition that Cicero is smart'. In the main text, I assume that phrases like that are genuine definite descriptions since this is the worst case for sententialists, who need to explain why in substituting a 'that'-clause denoting a sentence with a description denoting a proposition we preserve truth in the context of 'to believe'. But, first of all, it is in general not obvious when something that looks like a definite description is in fact a genuine definite description. As Kripke (1980: 26) reminded us, for

propositionalism to be noticed: while propositionalists can take 'the proposition that Cicero is smart' as equivalent to 'the proposition identical with that Cicero is smart', according to sententialism the 'that'-clause does not denote a proposition. Suppose that we represent the possible choices a person makes with regular polygons. For example, we could imagine that a square represents the choice of going to the cinema. We could then use 'the square choice' for the choice of going to the cinema, but not because the choice is the choice of the square, but because the choice is the choice that can be represented with a square. For sententialists 'the proposition that Cicero is smart' is similar, in that it purports to denote the proposition that we can represent as "Cicero is smart".

For propositionalists,

that Cicero is smart
the proposition that Cicero is smart

are co-denotational. For sententialists, by contrast, if Bruno's favourite sentence is "Cicero is smart", and if 'Tom' is a name of the sentence "Cicero is smart",

that Cicero is smart
Tom
Bruno's favourite sentence

all denote the sentence "Cicero is smart" and are therefore co-denotational. But sententialists can nonetheless recognize a difference between these co-denotational terms. When we denote a piece of language, there are two very different ways to do it: we can *display* the linguistic item, or we can denote it without displaying it. The name 'Tom' and the description "Bruno's favourite sentence" denote the sentence "Cicero is smart" but do not display it, while the 'that'-clause displays the sentence it denotes. Thus sententialists cannot see a difference between the three

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example, the Holy Roman Empire was neither holy, Roman, nor an Empire, but we use the description-looking 'The Holy Roman Empire' to denote that non-holy, non-Roman, not an Empire which was the Holy Roman Empire. Moreover, the thesis in particular that 'the proposition that Cicero is smart' is a genuine definite description that purports to denote a proposition can and has been called into question. According to Hofweber 2007: 25-27, for example, 'the proposition' is not a genuine description but a mere device of focus, so that it is not necessarily to be counted as a singular term. If Hofweber is right, then sententialists have no trouble in accounting for

Olga believes the proposition that Cicero is smart.

Together with Hofweber, they can hold that this is semantically tantamount to

Olga believes that Cicero is smart

and the addition of 'the proposition' should just count as a form of emphasis or sentential focus. Why 'the proposition' and not 'the sentence', though? I think sententialists can hold that even though 'that'-clauses do denote sentences, we developed an emphatic use according to which we use 'the proposition' to mark the fact that the subject of the attribution does not have the sentence as the direct object of her belief.

terms in terms of denotation, but they can see a difference in terms of whether or not the bit of language is displayed. We will see in detail why this matters in Chapter 3, but we can roughly already see the point via a comparison. Imagine you want to communicate that you painted something which resembles Turner's *Norham Castle, Sunrise*. There are various ways in which you can communicate this: you can say

My new painting resembles Turner's *Norham Castle, Sunrise*

or, given that Turner's *Norham Castle, Sunrise* is Bruno's favourite painting, you can say

My new painting resembles Bruno's favourite painting.

In both these cases, you have not displayed the painting that you want to show has a similarity with your painting. But you can also go with your interlocutor to the Tate Britain and, while pointing to Turner's *Norham Castle, Sunrise*, utter

My new painting resembles this.

It is clear that this third way of communicating what you wanted to communicate is somehow different, because the painting is somehow there for you and your interlocutor, at your disposal, and you displayed it to that end. Now, however exactly the difference is to be accounted for in the case of the painting, sententialists can hold that the very same difference can be detected in the case of

that Cicero is smart
Bruno's favourite sentence
Tom

and the case of the 'that'-clauses is to be seen as similar to the case of when your took your friend to the Tate. This does not mean that sententialists are forced to hold that in uttering a 'that'-clause a subject is performing a pointing or that there is a hidden indexical in a 'that'-clause. For sententialists can hold, together with Christensen (1967: 367), that "it is time to give up the prejudice that we must deal in language with linguistic objects in quite the same way as we talk about nonlinguistic objects". They can in fact hold that paintings and language are different, in that a piece of language can be part of a sentence, while the painting cannot be directly part of a sentence, and that is why we need some extra pointing. Actually, sententialists can be even more cautious and hold that maybe language is not that special after all. For example, take an old example by Horn (1989: 564-565, f. 14):

Piano student plays passage in manner μ

Teacher: It's not [plays passage in manner μ] —it's [plays passage in manner μ'].

Are the passages or the manners literally part of the sentence? It is not obvious how to answer. But these are orthogonal questions that do not impinge on sententialism. However Horn's case is to be explained, and however the displaying of the painting is to be accounted for, for our purposes it is sufficient to note that, no matter exactly how, there is a difference between denoting the painting with 'Turner's *Norham Castle, Sunrise*' and 'Bruno's favourite painting', on the one hand, and with 'this' uttered while pointing to Turner's *Norham Castle, Sunrise*, on the other. This obvious difference is exactly the difference sententialists can recognize between denoting a sentence with 'Bruno's favourite sentence' and 'Tom', on the one hand, and with 'that Cicero is smart', on the other. Even though the three terms are co-denotational, only the 'that'-clause *displays* what it denotes.

2.1.2 WHAT ARE THOUGHTS?

According to propositionalism, when

Olga believes that Cicero is smart

is true, Olga believes a proposition, and the 'that'-clause, in denoting such proposition, denotes the object Olga believes. So propositionalists, in providing an account of the denotation of 'that'-clauses, also provide an account of thoughts. Their account of language about attitudes is therefore necessarily also an account of attitudes. It follows that within a proposition-oriented account of sentences about attitudes, one needs to answer some questions about attitudes themselves. For example, one needs to establish whether all attitudes are toward propositions, and many have answered this in the negative. One example is the champion of propositions, Frege, who held (1892/1984: 167-168) that

> for the dependent question in phrases such as 'doubt whether', 'not to know what' … words are to be taken to have their indirect meaning ... the meaning of the subordinate clause itself was indirect, i.e. not a truth value but a thought, a command, a request, a question. The subordinate clause could be regarded as a noun, indeed one could say: as a proper name of that thought, that command, etc., which it represented in the context of the sentence structure.

Thus according to Frege some attitudes have thoughts, i.e. propositions, as objects, some have commands, requests or questions. Similarly, Castañeda (1974) held that intentions and

prescriptions cannot be reduced to attitudes toward propositions, and he coined the label 'practitions' for these different objects of attitudes. According to him,

Jones ought to close the door

should be taken as true just in case the practition *Jones to close the door*, as something not reducible to a proposition, is justified.

Moreover, many have held that some attitudes have, as objects, not propositions, but objects such as you and me. Montague (2007: 507-511), for example, has recently discussed sentences like

Dave loves Laura,

and advocated that they cannot be taken as tantamount to something of the form

Dave loves that Laura is *F*.

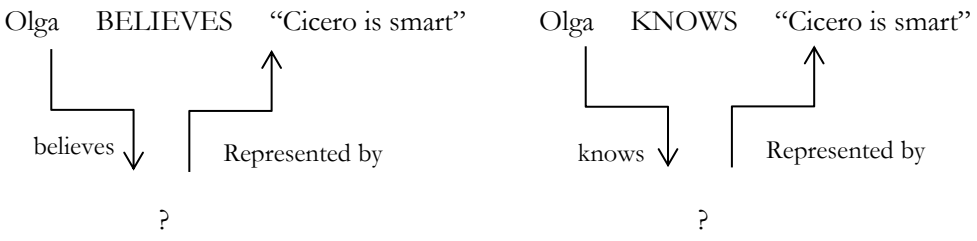
Furthermore, even within the field of propositional attitude sentences in which 'that'-clauses occur, propositionalists, in offering an account of attitudes while offering an account of sentences about attitudes, need to establish whether all attitudes are toward propositions, i.e. whether all 'that'-clauses denote propositions. Within the propositionalist tradition, the main stream holds that 'that'-clauses do always denote propositions when they occur in the context of propositional attitude sentences; but some have instead suggested that this is not actually the case (Asher 1993: 27-31; 57-9; 171-212; Geach 1962; Hossack 2007; Merricks 2009; Moffett 2003; Parsons 1993; Ryle 1929-1930: 111-114; Vendler 1972. Also King 2007: 152; 2014b: 201-208 considers a similar account). In particular, some have suggested that facts and propositions are entities of different kinds, and that knowledge and belief are not homogeneous, in that in the context of 'to believe' 'that'-clauses denote propositions, while they denote facts in the context of 'to know'.

From the sententialist point of view, the situation is different. For according to sententialists, we do not denote the objects of the attitudes in propositional attitude sentences, but a sentence that can represent such objects. Thus the following question – what according to sententialists is that *some thing* that we can represent as "Cicero is smart" if Olga believes that Cicero is smart? – is somehow misplaced, and sententialism can and should be neutral on the issue. What are thoughts? Are they structured? Do we think in language? Are we directly related to the world, or are we related to the world via an internal representation of it? Are there any singular thoughts,

or are all thoughts notional? Sententialism is neutral on these issues. Sententialism should be taken as holding that, no matter what the answers to those questions are and no matter what thoughts really are, when we say in our natural languages that Olga believes that Cicero is smart, we represent what she believes, whatever that is, with one of our tools of representation, i.e. our own language. Since sententialism is neutral on these issues it does not need, luckily, to take any stance on the issue of whether knowledge and beliefs are homogeneous. In fact, sententialists can explain the data that need to be explained both in the case in which objects of belief and knowledge are the same in kind and in the case in which they are essentially different. Let us start with the first case, i.e. the case in which with different predicates we have essentially different entities, so that what we can believe is not what we can know. The main linguistic datum against endorsing this position is that the following sentences,

I always believed that you were a good friend; now I know *it*
I already knew *what* you just told me
I will confess *something* you will find hard to believe,

seem all to be possibly true. Thus, it seems that what you know, believe, confess, tell are objects of the same kind (Crawford 2014: 190-191; Soames 2012: 214; Textor 2011: 79-80; Williamson 2000: 43). But even if beliefs and pieces of knowledge are essentially different entities, sententialism can still perfectly and quite easily explain the truth of sentences like those above.[21] For according to sententialism, beliefs and pieces of knowledge are not the entities denoted by 'that'-clauses in propositional attitude sentences. Even if Olga is related to different entities when she believes that Cicero is smart and knows that Cicero is smart, still the 'that'-clause 'that Cicero is smart' could denote the very same entity, i.e. "Cicero is smart":



[21] As Treanor 2013: 580-591 shows, it is not obvious that knowledge in fact divides up into pieces, and it might well be that this is only a figure of speech. While I will employ the idiom for ease, it is clear that sententialism is not committed to the idea that there are pieces of knowledge the sum of which is all we know. However this should be exactly cashed out, sententialists can hold, together with Grandy 1986: 323, not that a sentence can represent *a piece* of knowledge, but that a sentence can be a *partial* representation of what a subject knows, whatever that thing is. Of course, defining the notion of *partial representation* is problematic. As Bach 1997 remarks, if our knowledge is something like a picture or a map, "there are 'no natural ways of carving up maps at their representational joints,' natural ways of itemizing what they say and correlating each item with the way they say it" (233). But this might not be in the end such a bad result: as we will see below, representation is contextual, and one can hold that it is exactly because there are no joints in nature that in different contexts we might carve differently.

Thus in something like

I always believed that you were a good friend; now I know *it*

the 'it' could still pick out the denotation of the antecedent, i.e. the sentence "You were a good friend". Let us use an example to make this clearer. While when we smell a piece of Camembert, we smell its smell, when we taste the same piece of cheese, we do not taste its smell, but its taste. Thus the relations thanks to which we are related to the cheese are different in the two cases, not just because one is a relation of smell and the other a relation of taste, but also because in the smell case we are related to the smell, while in the taste case we are related to the taste. But this obviously does not mean that in

I smelled that piece of Camembert and you tasted *it*

the 'it' cannot still denote a piece of Camembert.

Thus if the objects of different attitudes are different, sententialists seem to have an advantage over propositionalists: since according to propositionalists 'that'-clauses denote the objects of the attitudes, they are forced to hold one of the following equally unpalatable theses. One option is to maintain that in

Olga believes that Cicero is smart
Olga knows that Cicero is smart

the proposition plays a different role, by being the direct object of the attitude in one of the sentences and by being the indirect object in the other, so that Olga is related to that proposition by being related to something else somehow related to the proposition (Parsons 1993). The second option is to hold that 'to believe' and 'to know' work differently, so that they designate different relations, and only one of them is such that the proposition is the direct *relatum* (Moffett 2003: 86-92). These two options seem hardly justifiable, since it does not seem that either 'that'-clauses in the context of different predicates, or different predicates of propositional attitudes, work in such a non-homogeneous way. The third option is to hold that 'that'-clauses are ambiguous. But then an alternative account is needed of the examples we have seen, i.e.

I always believed that you were a good friend; now I know *it*
I already knew *what* you just told me
I will confess *something* you will find hard to believe.

One may try to hold that these sentences are in fact ungrammatical (Ryle 1929-1930: 113; Vendler 1972: 98; 1980: 278). Ryle, for example, holds: "I think ordinary usage supports me … We say: 'I don't think, I know,' and 'I don't know but I think so and so.' ". But this approach is hardly convincing. Ryle is right that those are perfectly reasonable statements, but they can be explained as meaning something like what the follows mean:

I do not merely think that snow is white, I know it.

Alternatively, one can hold that belief-knowledge examples are to be taken as similar to something like

Dave and Laura have the same T-shirt,

read as saying that Dave has his T-shirt, Laura hers, but the two are similar. Thus, one can try to hold that

Dave knows that which Laura believes

should be taken as having a more complex structure and thus ultimately as expressing that the two different objects of the attitudes are similar (Moltmann 2013: 19, f. 5). But when I say that Dave and Laura have the same T-shirt, meaning that their T-shirts are similar, then I can add

Of course not the very same one, Dave has his own, Laura hers.

This does not seem to make much sense with knowledge-belief examples: the following is at least odd

There is something that Dave knows and Laura believes, but of course Dave has his piece of knowledge and Laura her belief.

Alternatively, one can try to hold that

Dave knows what Laura believes

should be taken as similar to something like

After drinking the bottle of rum, Smith smashed it over John's head,

where the sentence can well be taken to be true even if what was drunk cannot be, literally, what has been smashed (Harman 2003: 177-178; Hossack 2011: 127; Parsons 1993). But while with the bottle and similar cases a moment's reflection makes it clear that 'it' cannot denote what 'the bottle of rum' denotes, and a pedantic speaker of English might even correct us, with something like

Dave knows what Laura believes

we cannot be faulted on mere grounds of English grammar: "[t]o assume that the pedant would say 'No, it is not correct to say that he knows what she believed, he knows of the fact that she believed' is bizarre"(Textor 2011: 80).

Thus, if objects of belief are not objects of knowledge, the cross-quantificational and anaphoric sentences seem to create a serious issue for propositionalists. Whether or not they can solve it, and even conceding that they can solve it, sententialists certainly do not have any issue to solve. Let us then move to the second case, i.e. that beliefs and pieces of knowledge are objects of the same kind. The main linguistic reason why some have suggested that this is not the case is that we tend to use 'the proposition that Cicero is smart' for what Olga believes and 'the fact the Cicero is smart' for what Olga knows. Propositionalists tend to hold that facts are propositions, but even if that is the case, the fact that we tend to use 'proposition' with some predicates and 'fact' with others cries out for an explanation.

I actually think that propositionalists can provide quite a good explanation of this. For they can hold that when we represent an attitude, we do not necessarily endorse what we are attributing, for two main reasons. First of all, our commitment to the truth of what we are attributing might be irrelevant, for example when we are considering the attitudes of a subject in order to explain her behaviour. Even if we also think that Camembert is lovely, that does not matter when it comes to explaining why Olga buys a piece of Camembert every week. Secondly, it may well be that we take what we are attributing to actually be false but there is still a point in making the attribution. Even if we think that Camembert is actually not nice, we might still want to tell somebody what Olga's opinion about it is. In those cases in which we do not want to endorse what we are attributing, we use 'to believe'. If facts and propositions are entities of the same kind, there are many more propositions than facts, since there are all those false propositions that, qua being false, cannot be facts. In calling the object of a belief a 'proposition', we therefore show that there is no commitment, on the side of the attributer, to the truth of what has been attributed. When we instead ascribe knowledge, we do endorse the truth of the object of the attitude: we cannot assert that a subject knows something if we think that that something is false. Thus since in knowledge ascriptions we are endorsing the truth of the object of the

attitude, we tend to say that it is a fact, and even though all facts are propositions, we do not say that what is known is a proposition. Why so? Because calling it a 'proposition' would make it appear that we do not know whether it is true. Thus according to this explanation, saying that somebody knows a proposition is somehow similar to saying that we discovered something, but we still wonder whether it is the case: in using 'to discover', we are committing ourselves to the truth of what we discovered, and we cannot then hold that we are still wondering about it being the case. Similar considerations can be put forward for other attitudes: with 'to tell', for example, we can both say that Olga told us the facts, or that she told us a story. While with the first we are endorsing the truth of what she told us, so that the attribution tells the interlocutor also something about our attitudes, with 'story', since stories can be false, we are not endorsing the truth of what has been told, and thus we do not communicate that we also think that what has been told provides correct information about the world.

But even though this is a good explanation, propositionalists would still have to explain why we can say both that what we believe is true and, for example, that what we fear is not going to happen. Intuitively, things that are true or false are not the kind of things that do or do not happen. If what we have attitudes to is always a proposition, so that propositions are what we believe and fear, then they are a kind of monstrous entity, which have properties that are intuitively incompatible (Merricks 2009). I doubt that propositionalists can explain this easily, and Soames's recent solution (2014: 244) of holding that

> the unreflective opinion that propositions can be neither things we do nor things that happen is not sacrosanct and may itself be due either to a failure to theorize, or to a tendency to do so incorrectly

does not seem to everybody's taste: was it really a systematic incorrect theorizing that led us to think that truth and happening cut the world orthogonally? Be this as it may, sententialists do not need to face this issue, since from their own point of view the situation is very different: as we saw above, for sententialists, while in the former of the sentences in each couple

Olga believes that Cicero is smart
Olga believes the proposition that Cicero is smart

Olga knows that Cicero is smart
Olga knows the fact that Cicero is smart

a sentence is denoted, in the second a different entity is denoted, so that these are not cases of substitution of co-denotational terms. As we saw above, the relation between the truth-conditions of the sentences in each couple can be explained on the basis of what it means to believe a proposition and what it means to know a fact, exactly as the relations in the truth-conditions of

Olga believes Cicero
Olga believes that Cicero is sincere

can be explained by relying on what it takes to believe somebody. Just as when we believe a proposition we believe it to be true, so when we know a fact we know it to be the case; so we know that Cicero is smart is the case, i.e. we know something that we can represent as "Cicero is smart". As for fearing, sententialists can say that even though the objects of the different attitudes are homogenous, when you fear that Cicero is smart, you are also related to an eventuality, and that eventuality is what will or will not happen.

Thus whether or not beliefs and pieces of knowledge are entities of the same kind, propositionalists have to explain some data that do not seem easy to account for. Sententialism, on the other hand, whatever is the case with the metaphysics of facts and propositions, can explain perfectly all the data that require explanation. Therefore sententialism is, can, and should be taken as essentially neutral on what thoughts are and what we are related to when we think, believe, know and fear something.

2.2 SENTENCES AS TOOLS OF REPRESENTATION

According to sententialism, a sentence is denoted in a propositional attitude sentence. In the previous section, I suggested we combine sententialism with the thesis that the denoted sentence is to be taken as a representation, i.e. with the thesis that if

Olga believes that Cicero is smart

is true, the sentence "Cicero is smart" is an apt tool for representing what Olga believes. We have seen that we do not need to establish what this thing is that Olga believes. But we do need

to establish when an English sentence is an apt tool for representing an attitude, because this impinges on the truth-conditions of propositional attitude sentences. This is what we will try to do in this section. Clearly, the aptness of an English sentence cannot depend on whether Olga speaks English, for otherwise English propositional attitude sentences would be true only of English speakers, and this seems plainly absurd (Church 1943: 45; Speaks 2014: 12; White 1972: 78). Thus, as Quine (1956: 186) efficaciously puts it, we should take it that sententialism

> is not, of course, intended to suggest that the subject of the propositional attitude speaks the language of the quotation, or any language. We may treat a mouse's fear of a cat as his fearing ... a certain English sentence. This is unnatural without being therefore wrong. It is a little like describing a prehistoric ocean current as clockwise.

Put differently, just as one can perfectly intelligibly and correctly report that a map says that Houston is further south than San Diego without implying that the map has sentences on it, so we can employ an English sentence to report what a subject believes, without implying either that she speaks English or that she speaks at all (Grandy 1986: 323).

But what does the representational aptness depend on, then? In order to understand this, we might start with some general, and pretty uncontroversial, remarks on when something is an apt tool for representing something else. A first thing to notice is that, clearly, adequacy depends on our purposes, i.e. on what we are interested in when we represent something. Take for example a map of London's Underground. If we employ only straight lines between dots, we can represent London's Underground, but something is missing: for example, we cannot represent both the real length of the journeys and the real relative position of the various stops. If we care just about the lengths, then we can take straight lines as adequate tools, but if we instead care about both the positions and the lengths, we have to count the straight lines as inadequate. Moreover, we should also notice that in building our representation, depending on what we are interested in representing, we are guided by some principles, and we take it to be a *desideratum* that the representation we end up with is in accordance with those principles. Imagine we want to represent the preferences of a subject. Quite intuitively, we take it to be a principle of rationality that a rational subject does not have cycled preferences, i.e. if you prefer *a* to *b*, you should not end up also preferring *b* to *a*. Now let us suppose that we want to represent Olga's preferences concerning the shapes of fruits. If we have at our disposal only regular polygons up to the dodecahedron, we would end up with many fruits having the same shape. If we are using the most similar polygon, for example, while bananas will be the only ones assigned to the triangle, oranges, apples, mangos, watermelons and grapefruits would all end up being assigned to the dodecahedron. Now Olga's preferences are as follows: she prefers the shape of apples to

the shape of bananas and the shape of bananas to the shape of oranges. She even has good reasons for that: she likes the curvy top of apples very much, and even though she finds bananas to have a pleasant bowed body, she still prefers the curvy top of the apples and so the shape of apples in general. Oranges have neither the curvy top nor the bowed body, so she prefers the shapes both of bananas and of apples to the shape of oranges. But if we represent our shapes as above, Olga ends up preferring the dodecahedron to the triangle and the triangle to the dodecahedron. Would we then conclude that Olga is in fact irrational in her preferences? Of course not. We would conclude instead that our representation of the shapes with the most similar regular polygon up to the dodecahedron is inadequate for representing Olga's rational preferences.

Let us go back to propositional attitude sentences. As we will see in §2.2.1, in taking 'that'-clauses to denote not the object of the attitude, but something able to represent such an object, sententialists can quite easily explain, without any need to introduce a *de re*/*de dicto* distinction or anything similar, why the truth-value of the very same propositional attitude sentence seems to change from context to context. In §2.2.2 and §2.2.3 we will move to Frege's and Kripke's notorious puzzles. As we will see, from the point of view of sententialism the puzzles are essentially concerned with when a representation is to be taken as adequate, so that discussing the puzzles will allow us to see better the notion of representation. As we will see, moreover, by relying on the considerations just made concerning representation in general, sententialists can solve the puzzles (or dissolve them, or show why they cannot be solved) in quite an interesting way.

2.2.1 TWO CASES

Let us suppose that Olga believes that Cicero is smart. Does Olga also believe that Tully is smart? From the point of view of propositionalism, the question can be puzzling. For if names are directly referential, so that they refer directly without the mediation of a Fregean *Sinn,* it follows that since 'Cicero' and 'Tully' are co-denotational,

Cicero is smart
Tully is smart

express the same proposition. Since, moreover, according to propositionalism, in

Olga believes that Cicero is smart
Olga believes that Tully is smart

the 'that'-clauses denote that proposition, as the thing Olga believes, it follows that the two attributions are either both true or both false. But it seems that the truth-conditions of the two attributions are different.

As we have seen, according to sententialism a 'that'-clause does not provide us with what Olga believes, but with a sentence that can represent that. Thus from the sententialist perspective, supposing that Olga believes that Cicero is smart is tantamount to supposing that "Cicero is smart" represents what Olga believes, and the puzzling question

Does Olga also believe that Tully is smart?

is tantamount to asking the following:

Does "Tully is smart" also represent what Olga believes?

Now the sentences "Cicero is smart" and "Tully is smart" are indeed different. If, moreover, we take names not to be directly referential, then the two sentences express something different, and thus there is no guarantee that "Tully is smart" can represent what "Cicero is smart" can represent. But what if proper names are directly referential, as I will assume, this being the difficult case? Clearly, if it is only what the sentences express that is relevant in establishing whether they represent an attitude, it would follow that if names are directly referential, and we can represent Olga's attitude with "Cicero is smart", we could also represent Olga's attitude with "Tully is smart". Thus for the sententialist what needs to be established, in order to see whether "Tully is smart" also represents what Olga believes, is whether sentences that express the same have the same representational power.

When do two tools of representation have the same representational power? As we saw above, this really depends on what we care about in representing something. As we have already seen in §2.1.2, we ascribe attitudes for two main purposes: firstly, we might want to provide, either for ourselves or for somebody else, some information about the world or about a subject's attitudes; secondly, we might want to explain the behaviour of the subject of the attitude. When we care about gaining or communicating new information about the world, we generally do not need to take into consideration other attitudes of that very subject. When, by contrast, we are interested in understanding the behaviour of a subject, we usually do need to consider more than one of her attitudes. Quite intuitively, the more we have to represent, the harder it is for our representation to be adequate. Let us see this point with an example. Suppose that Bruno told us that Tully wrote the *Somnium Scipionis*. We want to read the book, and we go to a bookshop to buy a copy. We cannot find the book, but we find the section labelled *Cicero* and, even if we did

not know that Tully wrote that book, we know of Tully and we also remember from school that Cicero is Tully. The shop assistant understands that we cannot find what we are looking for and comes to help us. She asks

What book by Cicero are you looking for?

In this scenario, we would probably find it correct to indirectly answer something like

I was told that Cicero wrote the *Somnium Scipionis*

and we would take our report as true. Given our purposes, in this case, therefore, we would take both "Cicero wrote the *Somnium Scipionis*" and "Tully wrote the *Somnium Scipionis*" as adequate ways to report what we have been told. Because, moreover, we are in front of the label *Cicero*,

I was told that Cicero wrote the *Somnium Scipionis*

is the sentence that more naturally comes to mind in order to represent what we wanted to represent. Now why is this the case? It is because we are here concerned not with understanding Bruno's attitudes and behaviour, but with what he told us just insofar as it carries information about a book we want to read and its author. Thus the other attitudes of Bruno are irrelevant, and "Cicero wrote the *Somnium Scipionis*" and "Tully wrote the *Somnium Scipionis*" have, given our purposes, the same representational power.[22]

But now let us instead imagine the following different case. Rose says that she does not know who wrote the *Somnium Scipionis* but that from now on she wants just to read writings by whoever this author is. Bruno tells Rose that Tully wrote the *Somnium Scipionis*, and Rose writes down 'Tully' in her diary. Rose goes to the bookshop and realizes that she forgot the diary. She decides to solve the embarrassing situation by asking for a copy of the *Somnium Scipionis* and any other book by the same author. The shop assistant comes back, and on the front pages of all the different books there is only a 'Cicero'. Rose goes home, finds the note and reads 'Tully'. The day after she sees Bruno and shouts: "You, liar, it was Cicero who wrote the *Somnium Scipionis*".

[22] Crimmins 1995: 475-476 and Recanati 2012: 189-192, quoting Crimmins, hold that it may be doubted that there are uses of a propositional attitude sentence like

Bruno told us that Tully wrote the *Somnium Scipionis*

in which the way in which the subject of the attitude thinks about Tully is irrelevant. The reason Crimmins put forward for doubting this is that the attribution "would serve the genuine conversational point of introducing a representation in the dialogue". I agree that denoting "Tully wrote the *Somnium Scipionis*" rather than "Cicero wrote the *Somnium Scipionis*" may also serve some representational purposes connected with the further aim of representing a subject's mental life. But as the example just given shows, sometimes we simply do not have this further aim, being interested only in the information about the world that the attitude permits us to gain.

A friend sees that Bruno is offended and asks us what Rose said to him. We tell the friend that Rose called Bruno a liar. The friend asks us why Rose thinks that Bruno is a liar. The following answer would probably do: Bruno told Rose that Tully wrote the *Somnium Scipionis*, and she is complaining that Bruno is a liar because she thinks that it was Cicero who wrote it. But the following answer would clearly not do: Bruno told Rose that *Cicero* wrote the *Somnium Scipionis*, and she is complaining that he is a liar because she thinks it was Cicero who wrote the book. This second alleged explanation is actually an *explanandum*, not an *explanans*, and the friend would still have to work out what is going on. So in this case we would not take "Cicero wrote the *Somnium Scipionis*" and "Tully wrote the *Somnium Scipionis*" as equally adequate ways to report what Bruno told Rose. Why so? Because in this case we want to explain Bruno's and Rose's behaviours, and their other attitudes are relevant. So if we want to explain behaviour, we need to distinguish the representational power of sentences that indeed express the same, such as

Cicero wrote the *Somnium Scipionis*
Tully wrote the *Somnium Scipionis.*

For even though for some purposes the two would represent the same attitude, for other purposes the representation might need to take other attitudes into consideration, besides the one that the two sentences are supposed to represent. Thus when we represent the attitudes of a subject, we might have to *make up a distinction out of no real difference*, even assuming that there is no real difference, in order to represent how another subject takes the world to be. But this is something that should not puzzle us, and it is typical of representation. Take the following different example of representation. There are two lotteries. A rational subject has £1 and wants to buy a ticket only on the condition that it is better to buy a ticket for that lottery than for the other. The jackpot is the same and the number of tickets is the same. In fact the probability that he will win is equal, so that, objectively, the two choices are on a par. But the subject thinks that for the first lottery there are higher chances for his ticket to be selected. Given that the prize is the same, he concludes that the first lottery is better than the other, and so chooses it. Now since we know that objectively the two are exactly on a par, from our perspective the subject would have to adopt a Buridan's ass attitude and not buy any ticket. But in fact we can make sense of his choice. Exactly because we can make sense of his and similar choices, we introduced the notion of *subjective probability*, and if we want to represent his perfectly coherent behaviour, we should employ the subjective probability and thus distinguish the subjective expected utility of the two lotteries, even though we know that the two lotteries really have the same expected utility for him. Similarly, even though we know that

Cicero wrote the *Somnium Scipionis*
Tully wrote the *Somnium Scipionis*

express the same, we might need to differentiate them.

We should note that according to sententialism the difference or identity in representational power between sentences like those above has nothing primarily to do with there being proper names occurring in the sentences. Sententialists would in fact account similarly for the representational power of sentences in which no proper name occurs. To see this, we can borrow the following example from Joseph Moore (1999: 7-8):

> Suppose that after pondering the evidence for several days detective Columbo snaps his fingers and mutters to himself:
>
> Aha! It is not the case both that the clock was working properly and that there was not a blackout.
>
> Columbo's utterance was meant for his own ears only, but it is overheard by snooping beat reporter Smith, who rushes back to the newsroom. The headline of that evening's paper reads:
>
> Busted Clock or Blackout
>
> And the lead article begins:
>
> Marking a significant breakthrough in the sleeping secretary scandal, detective Columbo said today that either the secretary's clock was not working properly or there was a blackout on the morning the secretary of state failed to show at the peace negotiations. If Columbo's belief can be supported with solid evidence, then perhaps the enemy will finally come to see that they have misinterpreted the secretary's absence all along.
>
> …
>
> Now consider a second scenario. Suppose Columbo's utterance is overheard by Jones, a spy hired by the munitions manufacturers who successfully perpetuated the war and their sales by sabotaging the secretary's alarm clock. Hearing Columbo's remark, Jones rushes back to company headquarters and makes the following report to her boss:
>
> I just overheard detective Columbo say that it is not the case both that the clock was working properly and there was not a blackout. Detective Columbo is notorious for eventually getting to the bottom of matters, but lucky for us he is meticulously slow in his deliberations and in his deductions. Right now he believes that it is not the case both that the clock was working properly and there was not a blackout, but it will be several hours until he infers that either the clock was not working properly or there was a blackout. Only when he comes to this second belief will he begin to make inquiries at the power plant and the clock company. Quick! Let's blow up the clock factory before he gets there.

From the point of view of sententialism, Moore's case shows that the aptness of a sentence as a way to represent an attitude depends not just on what proper name occurs in it, but also on the general form of the sentences themselves. When we care about representing Columbo's reasoning, as in the second case, we care about using a sentence which somehow mimics the form of his own train of thought. But clearly this is not always what we care about. Sometimes we just want information about the world, as in the first of Moore's scenarios, and then two

logically equivalent sentences of the different forms *Not (A and not B)* and *Not A or B* would equally do.[23]

The *Somnium Scipionis* cases show that *if* proper names are directly referential, it might happen that we should distinguish the representational power of two sentences even though they express the same. Moore's scenarios show that sentences expressing the same might need to be distinguished, and this even though proper names are not, in the end, directly referential. Moreover, if names are in the end directly referential, sententialists solve in similar fashion cases in which proper names occur and cases in which they do not. This seems welcome, since the *Somnium Scipionis* and Moore's cases seem indeed to cry out for a similar explanation.

Before moving to other cases, we may pause to note something on the notion of *representation*. As we have seen, according to sententialism, as it is developed here, if a propositional attitude sentence is true, then a subject is related to a sentence, and she is so related if two other relations hold: an attitudinal relation between a subject and what she has an attitude to, and a relation between what she has an attitude to and a sentence. As we saw above, this is also Davidson's (1968: 140), Higginbotham's (2006: 102-103) and Matthews' (2007: 223) idea. But we should now notice that the relation of *representation* here advanced can hardly be seen as the relations of *samesaying* or *matching in content* that Davidson and Higgibotham suggest. For, as we saw with Moore's scenarios and the *Somnium Scipionis* ones, we should distinguish the representational power of two sentences even though they do match in content. According to the account suggested here,

Cicero wrote the *Somnium Scipionis*

Tully wrote the *Somnium Scipionis*

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[23] Sententialists explain in similar fashion what happens in the so-called *Mates's puzzle*. Here is the puzzle (Mates 1952: 125): Let 'D' and 'D1' be abbreviations for two synonymous sentences. Then the following sentences are also synonymous:

Whoever believes that D, believes that D.

Whoever believes that D, believes that D1

But

Nobody doubts that whoever believes that D believes that D.

Nobody doubts that whoever believes that D believes that D1

seem to have different truth-conditions.

According to sententialism, if nobody doubts that whoever believes that D believes that D, then "Whoever believes that D believes that D" does not represent a doubt that anyone has, while if nobody doubts that whoever believes that D believes that D1, then "Whoever believes that D believes that D1" likewise does not represent a doubt that anyone has. While the two sentences

Whoever believes that D, believes that D.

Whoever believes that D, believes that D1

express the same, they have different forms. Difference in form, as we have seen, renders the sentences potentially different in their representational power. Thus, while in some contexts the two would be counted as equally apt to represent an attitude, there might be contexts in which that is not the case, given the overall attitudes of the subjects and what we care about in our representation.

can be seen as matching in content. But if

Bruno told us that Cicero wrote the *Somnium Scipionis*

were true when Bruno told us something that matches in content with "Cicero wrote the *Somnium Scipionis*", then we could not distinguish between this attribution and

Bruno told us that Tully wrote the *Somnium Scipionis*,

while we have seen that we might have to distinguish them.[24] When we consider sentences as tools of representation, they are different not just because they *say* something different, but also because they have different *forms*, exactly as we distinguish polygons not because of what they say, but because of their shapes, and it is their shapes that makes a difference as to what they can represent, in the light of the representation they are part of.

2.2.2 FREGE'S PUZZLE

What can sententialists say about sentences like

Cicero is Cicero
Cicero is Tully

? As we have seen, the form of a sentence is relevant in establishing its representational power. Thus sententialists can rely on the fact that while

Cicero is Cicero

has the form *a is a*,

Cicero is Tully

[24] For another difference between the account suggested here and Higginbotham's that also regards the notion of *matching in content*, see §3.3. I use *representation* to follow Matthew's terminology, which seems to me to be the most intuitive. But it should be noted that according to Matthews "Smith's belief that Tully is bald has as its representative [what is] designated by an utterance of the that-clause 'that Tully is bald', and this [representative] specifies the state of affairs to which Smith is related behaviorally in the way characteristic of beliefs." (233) While it is not clear what to be *behaviourally related to the state of affairs* means, in the end I think that Matthews's account leads to conclusions similar to those Higgibotham's and Davidson's accounts lead to. For I do not see how the states of affairs denoted by 'that Cicero wrote the *Somnium Scipionis*' and 'that Tully wrote the *Somnium Scipionis*' can be different, and, given this, I do not see how a subject can be differently behaviourally related to the very same state of affairs.

has the form *a is b*. Carnap (1947: 56-57) famously suggested that two sentences are synonymous only if they are *built in the same way*. Putnam (1954: 118-119) suggested a more sophisticated version of the Carnapian idea, according to which two sentences having different *logical forms* are not synonymous. A more sophisticated version of Putnam's suggestion has been advanced by Taschek (1995: 81-93), who, in the same spirit as what we have seen the sententialist can say, holds that what counts is not only the *local* structure, i.e. the structures of the two sentences themselves, but the *global* structure, i.e. also the structures of other sentences beyond those being evaluated as synonymous or not. Fine (2007) has more recently suggested something along the same lines, by holding that the meaning of a sentence also depends on whether the terms occurring in the sentence are *coordinated*. But, as we already know, sententialists do not need to go that way and can deny that a difference in the form of two sentences implies a difference in what those sentences express. For they can well take

Cicero is Cicero
Cicero is Tully

to be identical as to what they express, and still be different in their representational aptness. Sententialists can then take cases like

Olga knows that Cicero is Cicero
Olga knows that Cicero is Tully

as similar to the ones already considered: depending on what we are interested in, in representing an attitude, the difference in form might make one sentence more apt, as a tool of representation, than another. Take the example of Rose again, who was told by Bruno that Tully wrote the *Somnium Scipionis* and complained that he was a liar since on all her books only the name 'Cicero' appears on the front page. Imagine that Rose then comes to realize her mistake and therefore goes to apologize to Bruno. It would not make much sense to say that it is because Rose realized that she was wrong in thinking that Cicero is not Cicero that she also realized that Bruno was correct in holding that Tully wrote the book. Thus since we are interested in understanding Rose's behaviour, we need to distinguish the representational aptness of two identity sentences that express the same.

So far so good. But identity statements have been considered to raise some special problems, since they are taken to lead to the so-called *Frege puzzle*, which goes as follows:

> *a=a* and *a=b* are obviously statements of differing cognitive value; *a=a* holds *a priori* and, according to Kant, it is to be labelled analytic, while statements of the form *a=b* often contain very valuable extensions of our knowledge and cannot always be established *a priori* (Frege 1892/1984: 157).
> The words 'morning start' and 'evening star' designate the same planet Venus; but to recognise this a special act of recognition is required; it cannot simply be inferred from the principle of identity (Frege 1902/1980: 152).

The puzzle has been so much discussed (and may be *spectacularly overvalued*, as Predelli 2013: 13, f. 16, maintains) that it has been solved and dissolved probably in every possible way. What can sententialists say about it? First of all, it should be noted that sententialists can stay neutral on what thoughts are, so that they should not say what this *act of recognition* is supposed to be and what the fact that this act of recognition is required tells us about how the mind is structured. Similarly, sententialism is not a theory of how we know that a sentence is true, so sententialists are not forced to take any position on the alleged a priority of sentences of the form *a is a*. Thus, given that the puzzle is primarily a puzzle in thought and not in the language about thought, sententialists luckily do not need to worry. Still, sententialists can say something about identity sentences which is relevant to understanding how the representation of attitudes with sentences works in natural languages.

The first thing to notice to this end is that there are sentences of the form *a is not a* which are true. For example, my cat Cicero is not Cicero the Roman orator, and then there is a reading of

Cicero is Cicero

that makes it false. Thus, sentences of the form *a is a* can somehow *contain very valuable extensions of knowledge*. Of course, there is always a reading of

Cicero is Cicero

that makes it true and that reading does not extend what we already knew thanks to our knowledge of the principle of identity. But becoming aware that there is no reading of the sentence that makes it false, for example, would extend my knowledge. For even though this is probably not the most common way to gain new knowledge, knowing that there is no reading of "Cicero is Cicero" that makes it false is one of the ways in which I would then become aware that my cat is in fact the orator. In scenarios like this, a special act of recognition would then be required, and we all found ourselves in situations in which this recognition "comes as quite a shock" (Strawson 1979: 155). So there are cases in which

Cicero is Cicero

is on a par with

Cicero is Tully.

Furthermore, suppose that we came to know that the following,

Cicero wrote the *Somnium Scipionis*,

is true. Later we also came to know that the following,

Cicero wrote the *Epistulae*,

is true. Knowing that there is no reading of "Cicero is Cicero" that makes it false, and hence that there is only one Cicero, allows us to know that we are justified in moving to

Somebody wrote both the *Somnium Scipionis* and the *Epistulae*.

If we instead thought that there are two uses of the name "Cicero", and those two uses were in play in the two premises, then the inference would be "no more justified than the corresponding inference from the truth of 'Cicero is Roman' and 'Tully is an orator'"(Fine 2007: 81).

Thus the mere form of the sentences

Cicero is Cicero
Cicero is Tully

does not make them different as to whether they lead to new knowledge or whether a special act of recognition is needed or not. This in fact is what Frege himself (1892/1984: 157-158) urges:

> If the sign '*a*' is distinguished from the sign '*b*' only as an object (here, by means of its shape), not as a sign (i.e. not by the manner in which it designates something), the cognitive value of *a=a* becomes essentially equal to that of *a=b*, provided *a=b* is true.

But still, is it not true that it is only when we say that Olga knows that Cicero is Cicero that we have a feeling of having said that she knows a platitude? Do we not usually say things like "Of course she knows that Cicero is Cicero, how could she not know such a triviality?". Moreover, is it not true that we tend not to attribute knowledge with sentences of the form *a is a*? I think

sententialists can provide an explanation of why things are so with our practice of attributing attitudes with identity statements by relying on two considerations. The first consideration is that while for sentences of the form *a is a* there is always a reading that makes them true, a reading that we might suppose any subject is aware of, this is not in general true of sentences of the form *a is b*. It follows that using a sentence of the form *a is a* to represent an attitude would leave it open whether we are ascribing knowledge of a trivial instance of the principle of identity or not. Why would we leave it open when we can use a sentence of the form *a is b* that makes it much clearer that we are ascribing a piece of knowledge that required *a special act of recognition*? The second consideration is that not only does a sentence of the form *a is a* leave it open whether we are ascribing knowledge of a platitude or knowledge due to recognition, it is also the case that a sentence of the form *a is a* is generally interpreted as conveying the first kind of knowledge, due to how we use names. For, normally, the unqualified re-use of a proper name is one in which it is intended that the name will be re-used in the very same way as in previous uses, and in fact one who wishes to re-use the name differently "would be best advised to insert some qualifications" if she wants the audience to understand this (Sainsbury 2004: 210). Because of this, "Cicero is Cicero" is normally taken to be a case of a trivial truth, a trivial instance of the principle of identity. Since "Cicero is Cicero" leaves it open what kind of knowledge is ascribed and is usually taken to ascribe trivial knowledge, we tend to use it, in the absence of further reasons, for trivial knowledge and things like "Cicero is Tully" for those cases in which a special act of recognition was needed. This, I think, moreover, explains why, when it comes to attributing knowledge in order to gain new information about the world, we tend to use sentences like "Cicero is Tully". We do not discard "Cicero is Cicero" because it expresses something different, but because it is taken to be so trivially true that "Cicero is Tully" is the only one we think we and our audience might be interested in.[25]

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[25] From the sententialist point of view, Frege's puzzle is not essentially due to there occurring two co-denotational proper names, so that sententialists would account similarly, for example, for Russell's (1905: 485) example of Scott/the author of Waverley. But it is still worth observing that if names are, differently from what we assumed in the main text, somehow *indexicals*, sententialists can then follow Burge 1977: 355. According to Burge, sentences like

Cicero is Cicero

are similar to sentences like

This is this.

As Burge remarks: "We would find boring a claim of the form 'this = this', where 'this' is twice used to refer to some object under the same circumstances (cf. 'this is self-identical'). But we might be surprised by a claim of the form 'this = this', where the first 'this' is used with a nod toward a picture of the Hope diamond, and the second with a gesture to a dirty stone. A similar point holds for proper names. If Alfie knows someone in two different walks of life by 'Bertie', but thinks he knows two Berties, he will be interested if we tell him that Bertie (pointing to the person, or picture of him, in one guise) is identical with Bertie (indicating him in another)".

Moreover, sententialists can add that in normal uses names are such that their denotation somehow depends on other occurrences of the same name that precede them. In this way, sententialists would be able to explain why "Cicero is Cicero" is similar to "This is self-identical". If sententialists would then suggest that two occurrences of a proper name should be taken as anaphorically linked (Textor 2004: 206-207), or as semantically coordinated (Fine 2007), then the account would be similar to that of the tradition initiated by Carnap (1947) that we have seen at the beginning of this section. But this seems unnecessary.

2.2.3 KRIPKE'S PUZZLES

Although in the end they will be treated in the same way by sententialists, there are two of Kripke's puzzles (1979) and we will start by quickly presenting them both. We will then see what sententialists can say concerning them. Let us start with the London/Londres case. Pierre is a rational agent and a monolingual speaker of French. He has never been to London, but on the basis of what he has read he is disposed to assent reflectively and sincerely to the French sentence

Londres est jolie.

Then Pierre moves to a miserable part of London. All his neighbours call the city 'London' but he never realizes that 'London' and 'Londres' are two names of the same city. After a while, Pierre has learnt English from his neighbours, but he is unable to translate English into French or vice versa. Since he moved to a miserable part of London, he is disposed to assent sincerely and reflectively to the English sentence

London is not pretty

and he is not disposed to assent to the English sentence

London is pretty.

Finally, let us also imagine that, while in London, Pierre did not change any of the beliefs he ended up having in his French past. Now, although we are obviously perfectly able to describe the situation, here is the puzzling question:

Does Pierre believe, or does he not, that London is pretty?

Before seeing the sententialist (non)answer to this question, let us see the second puzzle. Peter is a rational agent and a competent speaker of English. One day he comes to know that there was a man called 'Paderewski' who was a brilliant pianist. He then became disposed to accept

Paderewski had musical talent.

After a bit, Peter also comes to know that there was a man called 'Paderewski' who was a famous politician. The politician and the pianist are in fact the same man, but Peter does not

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For sententialists can hold that these links between various occurrences of the same names are not semantic. On this, see §3.4.1.

realize this. He thinks that politicians are not good at music, and, while retaining all his previous beliefs, he becomes disposed to accept

Paderewski did not have musical talent.

In this case as well the situation is clear, but here is a puzzling question:

Does Peter believe, or does he not, that Paderewski had musical talent?

Let us see what sententialists can, and I think should, say about these two puzzling questions. The first thing to notice is that the puzzles are puzzling only if we assume that Pierre and Peter are rational and if we assume that, in order for a subject *S* to be rational, it cannot be the case that two sentences of the form

S believes that p
S believes that not p

are both true. For if Pierre (or Peter) could still be rational even if sentences of that kind were true of them, we could simply hold that, yes, he believes that London is pretty and also that London is not pretty. Is this assumption on rationality true? As Crawford (2004: 184) remarks, the principle "is often assumed to be beyond question ... on the other hand, many philosophers think it is equally obvious that the rationality assumption is false". But, if so, why is the option of holding that Pierre believes both that London is pretty and that London is not pretty so unpalatable, even though it is not obvious that the assumption on rationality is true? I think that sententialists can answer this question by holding that what the puzzles really show is that we take that assumption (be it true or false) to guide our representation, i.e. that when we *use* propositional attitude sentences to represent the attitudes of a rational agent, we take one of the *desiderata* to be that in the representation the subject does not end up *believing that p and believing that not-p*. The reason seems clear: even if the assumption is false, so that a subject can be rational while believing *that p* and that *not p*, attributing to a rational subject something of that forms still leaves it open that she is irrational, and it is better to rule this possibility out, given that we are representing the attitudes of a rational subject and rationality is something that we usually care about when it comes to attributing attitudes. Now according to sententialism the tools we use to represent attitudes is language itself. So from the point of view of sententialism the questions

Does Pierre believe, or does he not, that London is pretty?
Does Peter believe, or does he not, that Paderewski had musical talent?

ask us whether "London is pretty" represents one of Pierre's beliefs and whether "Paderewski had musical talent" represents one of Peter's beliefs. According to sententialism, in both questions it is presupposed that the sentences "London is pretty" and "Paderewski had musical talent" are representational tools for what Pierre and Peter do or do not believe. Are the presuppositions fulfilled? Let us see with Pierre and "London is pretty". If the presupposition is fulfilled, then we have every reason to think that Pierre does have a belief which we can represent with "London is pretty". Similarly, we also have every reason to think that "London is not pretty" represents another of his beliefs. But it follows that if our representational tools were adequate, we would end up with Pierre believing both that London is pretty and that London is not pretty. But Pierre is rational and we do not want to end up with a rational subject believing both something of the form *that p* and something of the form that *not-p*. If the assumption on rationality is true, that is something that rational Pierre cannot believe. But even if the assumption is false, there are still two reasons for why something of this form could be believed: either because the subject is irrational, or because she is mistaken. So if we represent Pierre's attitudes in that way, we either imply, or at least leave it open, that he is irrational, and it is better to rule that out. Thus "London is pretty" is not an apt tool for representing what Pierre does and does not believe, exactly as regular polygons up to the dodecahedron are not apt tools for representing Olga's preferences. Hence the presupposition – namely, that "London is pretty" is an adequate representational tool for what Pierre does or does not believe – is not fulfilled. It follows that the question

Does Pierre believe, or does he not, that London is pretty?,

since it relies on an unfulfilled presupposition, cannot be answered.

It is easy to see that the Paderewski puzzle is similar. If "Paderewski had musical talent" is an adequate representational tool for what Peter believes or does not believe, then we have every reason to think that both "Paderewski had musical talent" and "Paderewski did not have musical talent" represent two attitudes of Peter's. We would thereby either imply, or at least leave it open, that Peter is irrational, since he would believe both *that p* and *that not p*. But we know that Peter is rational, and we take it to be pretty important to represent that he is not irrational. It follows that the question

Does Peter believe, or does he not, that Paderewski had musical talent?,

since it relies on the false presupposition that "Paderesky had musical talent" is an adequate representational tool for what Peter does or does not believe, cannot be answered.

From the point of view of sententialism, therefore, the situation with the puzzling questions above is similar to when we are asked what is the greatest number. Since there is no greatest number, the question, in relying on the false presupposition that there is a greatest number, does not have a correct answer. The puzzles are essentially puzzles, in that the puzzling questions really do not have correct answers.

Before moving to another topic, we can see what according to sententialism the lessons are that we can learn from the puzzles. A first lesson is that the sentences a subject is disposed to accept are not necessarily sentences we can use to represent her attitudes. According to the *(weak) disquotational principle for English*, roughly, if a normal English speaker, on reflection, sincerely assents to '*p*', then she believes that *p* (Kripke 1979: 439). From the point of view of sententialism, the principle is tantamount to holding that if a subject assents to a sentence, then we can use that sentence to represent what she believes. But according to sententialism the principle is not always true. For there are cases in which the principle provides us with attitudes that conflict with the guiding principle seen above. In particular, in the case of Peter, given his overall attitudes, the sentences he assents to are not sentences we can use to represent his attitudes. Other cases in which the principle is false are those, as Kripke remarks, which concern sentences in which indexicals occur. For even if Pierre were disposed to assent to an utterance of

I am wise

uttered by John, still we could not ourselves denote "I am wise" to represent what Pierre believes, given that he can well believe that John is wise but that we are foolish.[26] Now, *pace* Burge, who takes the disquotational principle to be *absurd* (1982: 288), one seems justified in wondering whether it even makes sense to say that the disquotational principle is false also for non-indexical sentences. Being sincere means to assert and assent only in accordance with what one believes. Then is it not the case that if a subject assents to something sincerely, she believes it, and therefore she believes what she assented to? According to sententialism, this is not the correct way of putting the principle. For according to sententialism the relation between belief, assent and representation is more complex than it might seem at first glance: it is not that we assent to something which is what we believe in the corresponding propositional attitude sentence. According to sententialism, in a propositional attitude sentence we do not denote that which is believed, but we denote a sentence as a representational tool in order to represent what a subject believes. While the subject of the assent assents to a sentence on the basis of what she thinks is the case with the world, we denote a sentence as a representational tool on the basis of

[26] On this, see also §3.4.2.

what we think is the case with her overall attitudes. If the attitudes are those of Pierre or Peter, even if they sincerely assent to some sentences, we cannot denote those very sentences to represent those attitudes. Thus the situation is puzzling indeed.

The puzzles, moreover, show something we have already seen above, i.e. that the more we have to represent, the harder it is for our representation to be adequate. For before Pierre moved to London, it seems we could answer

> Does Pierre believe, or does he not, that London is pretty?

by answering that Pierre does believe that London is pretty. For we would not end up with an irrationality or with it being left open whether Pierre is irrational, and in that case "London is pretty" would then be an apt tool for representing what Pierre believes. But this does not mean, as it might seem, that Pierre does not retain, in London, all his previous beliefs. It simply means, from the sententialist point of view, that now that he has moved to London we cannot any longer represent his unchanged beliefs in the same way. Let us go back to the map of the tube. If we are representing only Waterloo and Southwark, straight lines between stops can represent both the real length of the journeys and the real relative position of the stops properly, so that for Waterloo and Southwark straight lines between dots are an apt representational tool both for the journeys and the positions. But when we add other stops, we see that this is not the case anymore. Thus, quite obviously, representations that were adequate for representing fewer things can become inadequate when we also want to represent other objects. This is exactly what happens with Pierre and Peter. Now that Pierre has moved to London, our previously adequate system of representation breaks down because we cannot now ignore the new belief acquired in London, and what we can say a subject believes depends on what else we can say she believes. Thus among the things shown by the puzzle is that while assent is an entirely local matter, involving each sentence separately, belief is not (Santambrogio 2002: 632).

There is nothing strange in the tube, or in Pierre and Peter, and in fact, as Kripke remarks, there are many alternative ways in which we can describe Pierre's and Peter's attitudes, exactly as there is a perfectly adequate map of the tube, i.e. the one that uses curved lines. One way to represent what Pierre and Peter believe is to employ two different names for London and for Paderewski. For if we denote "London is pretty" and "London* is not pretty", we can say that Pierre believes that London is pretty and that London* is not pretty without implying, or leaving it open, that Peter is irrational. Thus the puzzles also show that having more synonymous expressions enriches the representational power of our language, and so enriches our representational abilities. Therefore according to sententialism, having more synonymous words is not, as Church (1954: 71) urged, a *dispensable linguistic luxury*. According to Salmon (2012: 438),

who agrees with Church, the thesis that having more synonyms increases the expressive capacity of a language is *seriously implausible*. In particular, it might be taken as implausible considering that, as Kripke himself remarks (1979: 264), the view cannot plausibly be restricted to proper names of individuals, but must be extended, for example, at least to 'rabbits' and 'beeches'. But in understanding the role of 'that'-clauses in propositional attitude sentences, the prima-facie implausibility should, I think, fade away. Certainly, more synonymous expressions do not mean more meanings, but when we attribute attitudes we do not denote meanings, but expressions. Quite clearly, the more objects with different features we have for representing something, the easier it is for the representation to be adequate: if we could use all regular polygons and not just those up to the dodecahedron, for example, we could probably represent Olga's preferences about the shapes of fruits as rational.

2.3 SOME CONSTRAINTS ON WHAT SENTENCES ARE

According to sententialism, 'that'-clauses, as they occur in propositional attitude sentences, denote sentences. But what are sentences? Sententialism is a theory about the semantics of propositional attitude sentences and not a metaphysics, so sententialists can be partially neutral on the issue. Nonetheless, as many have remarked, there are some constraints that sententialism is forced to put on what sentences are (Cresswell 1980: 17-19; Lewy 1976: 48-58; George Moore 1925-6: 142; Putnam 1954: 114; Schiffer 1990: 245). In order to see what constraints, we may start with the following questions:

> In worlds in which '2' denotes 3, would 2 still be 2?
> In worlds in which '2' denotes 3, would '2' still denote 2?

The first question, in which the second '2' is used, intuitively has a positive answer that is not too difficult to establish: in the question we are using our '2', and we are therefore not speaking about a numeral, but about the number 2, and its identity with itself does not change in other scenarios simply because a sign has changed meaning.[27]

[27] In passing, we should note that there is in fact a way in which it can be denied that in
> In worlds in which '2' denotes 3, would 2 still be 2?

the used '2' denotes the number 2. One might in fact apply to numerals what Predelli 2001: 154-155 has called the *hyper-indexical view*, and therefore maintain that the denotation of a numeral with respect to a context *c* is the object denoted by relevant uses of that numeral in *c*. According to this account, the used

As for the second question, i.e.

In worlds in which '2' denotes 3, would '2' still denote 2?,

in it '2' is only mentioned, and we are thus asking about a numeral, a linguistic item. Now, is the '2' of this scenario and the '2's of other scenarios the same entity that has different meanings, so that '2' changes meaning just as Cicero changes properties from one scenario to another, or are they different homographic entities that have different meanings? Let us start with the assumption that they are the same entity. Then if, as it seems, it is possible that that entity changes meaning from this scenario to another, as stated in the antecedent, the answer to

In worlds in which '2' denotes 3, would '2' still denote 2?

is *no*. If instead the '2's of the different scenarios are different entities, then the second '2' in the question is ambiguous, in that it can denote the various different '2's of the various different scenarios. The question will have different answers depending on whether we are asking about ours or another scenario's '2'. If we are asking about another scenario's '2', that linguistic object does not denote 2 but 3, and the answer to our question is therefore again *no*: the '2's of the worlds under consideration denote 3. If we are asking about the actual '2', there are two further cases to distinguish. The first option is that the object does not exist in the other scenario, and then the question is similar to when we ask about Cicero concerning a world in which he does not exist: in a world in which Cicero does not exist, is he handsome? No, he would not be handsome, and so our scenario's '2' would not denote 2. The answer to our question is thus again *no*. The second option is that our '2' also exists in the other scenarios. In this case, if we ask about our '2' and our '2' exists also in the other scenario, the answer to our question

In worlds in which '2' denotes 3, would '2' still denote 2?

is *no* if our '2' could change meaning in some other scenario, and *yes* if it could not. Thus the answer to our question is *yes* only if our '2' necessarily exists also in the other scenarios and necessarily means what it means here.

Now take this question:

'2' denotes 3 and 3 is not 2. But, as Predelli remarks, the view is independently untenable. For let us consider a context c in which no language is spoken at all. According to the view, '2' has no denotation with respect to c, and thus the sentence

2 is a number

would presumably come out false. Thus according to the view, implausibly, the truth-value of sentences about numbers depends on there being subjects using numerals and not on the properties of numbers.

> In worlds exactly like ours for what concerns Olga's mental life and in which 'Cicero is smart' means that Cicero is dull, would Olga still believe that Cicero is smart?

Intuitively, the answer is *yes*: how can the change in meaning of a word change what Olga believes? In accordance with propositionalism, the answer is in fact *yes* because 'that Cicero is smart' denotes a proposition, not a linguistic item, so that the question is similar to

> In worlds in which '2' denotes 3, would 2 still be 2?

and not to

> In worlds in which '2' denotes 3, would '2' still denote 2?

When we ask what Olga believes in the other scenario, we are considering a non-linguistic object, and what the bits of the language of that scenario mean is irrelevant. According to sententialism, by contrast, in

> Olga believes that Cicero is smart

'that Cicero is smart' denotes a sentence, a linguistic item. Therefore from the point of view of sententialism the question

> In worlds exactly like ours for what concerns Olga's mental life and in which 'Cicero is smart' means that Cicero is dull, would Olga still believe that Cicero is smart?

is not similar to

> In worlds in which '2' denotes 3, would 2 still be 2?

but to

> In worlds in which '2' denotes 3, would '2' still denote 2?

Since sententialists should end up with the answer to the question being *yes*, that means that sententialists have to put constraints on what a language and its bits are. As we saw with '2', the only way in which the answer to

> In worlds in which '2' denotes 3, would '2' still denote 2?

is *yes* is the one in which, firstly, the '2' of this scenario and the '2' of the other scenarios are different entities; secondly, that '2' is disambiguated between denoting our '2' and another scenario's '2' so that it denotes ours; thirdly, that our '2' exists also in the other scenarios and, finally, that our '2' has the meaning it has necessarily. Therefore, sententialists can come up with the right answer by holding all the following theses: firstly, that there are two "Cicero is smart"s (Geach 1957:86; Richard 1996/2013: 149) so that linguistic items are not individuated merely in terms of the form, or otherwise the two "Cicero is smart"s belonging to our or the other scenarios would be the same entity; secondly, that in the question what we are asking about is our actual sentence; thirdly, that our sentence "Cicero is smart" exists also in the other scenarios; finally, that our "Cicero is smart" has the meaning it has necessarily. Put differently, using Church's words (1950: 99), a language can be taken as something like the language which was current in Great Britain and the United States in 1949 A.D. – an accidental entity, which could well not exist and whose words could well have different meanings – or as something like the language for which such and such semantical rules hold – a necessary entity whose meanings are fixed. The modal considerations above show that, as Church remarks, for sententialists it is better to opt for the second way of understanding what languages are.[28]

A thing to notice is that the second of the four claims above, according to which in questions like

> In worlds exactly like ours for what concerns Olga's mental life and in which 'Cicero is smart' meant that Cicero is dull, would Olga still believe that Cicero is smart?

what we are asking about is our actual sentence, is not a metaphysical claim, and sententialists can actually defend it by merely relying on linguistic considerations. For even though, according to sententialism, 'that'-clauses and marks of pure quotation are both devices for denoting sentences, sententialists can also recognize that they are different devices. In particular, quotation marks as devices of pure quotation are such that in an English sentence we may equally easily quote an English and an Italian sentence, as happens, for example, in

> Olga said: "Cicerone è intelligente".

[28] Thomason 1975: 234-235 suggests using sentences like

If 'red' meant what 'white' means, it would be true that snow is red

as a test for determining whether use or mention is involved, and holds: "I find this plausible enough that I am willing to give the test some weight as a criterion for the absence of quotation, as well as its presence. I mention this because of its application to belief contexts. Since

If 'red' meant what 'white' means, I would believe that snow is red

is false, the test indicates that the complement of *believe* does not involve reference to linguistic expressions." But, as shown in the main text, and as he himself recognizes, "[t]his conclusion is based only on prima facie evidence; it is defeasible."

Complement clauses, by contrast, typically belong to the very language of the whole sentence they occur in, and sentences in which the 'that'-clause is in another language would typically be taken to be *hideous linguistic jumbles* (Higginbotham 2006: 112). Thus, typically, the 'that' triggers the interpretation of the denoted sentence as belonging to the very language of the full attribution, as required by the second of the claims above.

But it should be observed that, although unusual, the phenomenon of *code-switching* is a real linguistic phenomenon, so that it seems possible to use sentences like

> Olga believes that Cicero is intelligente
> Olga believes that Cicerone è intelligente.

Nonetheless, I think the phenomenon should not be taken as able to show that sententialists cannot defend the thesis that in

> In worlds exactly like ours for what concerns Olga's mental life and in which 'Cicero is smart' meant that Cicero is dull, would Olga still believe that Cicero is smart?

what we are asking about is our actual sentence. First of all, it is not obvious that sentences like

> Olga believes that Cicero is intelligente
> Olga believes that Cicerone è intelligente

show that the 'that'-clause can belong to a different language with regard to the language of the whole attribution. For all here depends on what language these attributions belong to. Since, typically, sentences like these would be used by bilingual speakers in front of a bilingual audience, sententialists may here hold that these sentences really belong to the language of the speakers involved in the conversation, which is not English, but an enriched version of English, to which also some or all Italian words belong. If this is the case, then the 'that'-clauses in fact belong to the language of the attributions they occur in.

Secondly, I think it is clear that cases like these should be taken as deviations from the norm. For imagine that 'intelligente' also belonged to English, in which it meant what 'attractive' means. With the desire to communicate that Olga believes that Cicero is attractive, we would probably simply utter

> Olga believes that Cicero is intelligente.

But if we wanted instead to communicate that Olga believes that Cicero is smart, even though we were in front on an audience that we know is competent in Italian, we would probably not utter the unqualified

Olga believes that Cicero is intelligente.

We would probably choose something along the following lines

Olga believes that Cicero is, as we say in Italian, intelligente
Olga believes that Cicero is intelligente, I mean, not in the English sense.

This, I think, shows that the norm is that the words are intended and taken to belong to the very language of the attribution. Surely, spoken languages are very flexible, and, depending on who are the speakers, what is common knowledge among them, etc., different sentences would be chosen and the same sentences would be taken differently. If we all know, for example, that my English lexicon is very poor, and that I typically use Italian words with the hope of being somehow understood, you would probably not expect me to know the recherché scientific English word 'ananas'. If you know that 'ananas' is the common word in Italian for pineapples, you might well take my unqualified

Olga believes that ananas is very summery

as involving in fact an Italian word. But again this seems an extremely unusual case of deviation from the norm.

The reasons sententialists can detect behind this norm will become clear in the next chapter. Before seeing this, we should note that, by relying on this observation about the constraints on which language the 'that'-clauses belong to, sententialists can also solve another problem that has been raised: the problem is that since there are sentences which belong to more than one language, sententialists introduce an ambiguity that does not seem to be present in propositional attitude sentences. For example, as Davidson remarks (1968: 135), the sounds "Empedokles liebt" do fairly well as a German or an English sentence, in one case saying that Empedokles loved and in the other telling us what he did from the top of Etna. Similarly, the string

I Vitelli Dei Romani Sono Belli

can work both as a Latin and as an Italian sentence. In Latin it means *Go Vitellio to the sound of the war of the Roman Gods*, while in Italian it means *Roman calves are nice*. The prima-facie problem is that while a sentence like

Dave believes that Empedokles liebt

cannot express that Dave believes that Empedocles loved, according to sententialists the sentence "Empedokles liebt" is denoted, and, therefore, depending on what language it belongs to, it seems that it can actually express that Dave believes that Empedokles loved. Because of this issue, in 1956 Quine (1956: 186) held that the relativity to the language should be made explicit, and sententialists should hold that in a sentence like

Olga believes that Cicero is smart

we are somehow denoting the English language. This is surely unappealing but, as we just saw and as Quine himself recognizes in 1970 (1970: 14), luckily there is no real need to go that way. Since the norm with propositional attitude sentences is that the denoted sentence belongs to the very language of the full attribution, it follows that even if no reference to English is made, "Empedockles liebt" is to be taken, other things be equal, as belonging to English, no matter whether those sounds can work in German as well. Moreover, the fact that sententialism allows that the norm might not be followed, and so that

Dave believes that Empedokles liebt

might be taken to express that Dave believes that Empedokles loved, is actually to be welcomed. For the following, although unusual, seems an attribution we might be happy to make:

> Dave believes that, well I do not know how to say it in English, that Empedokles liebt, you understand it, right?
> Dave believes that Empedokles liebt, as they say in Berlin. [29]

Having seen that inter-linguistic ambiguity does not seem to threaten sententialism, we can now see that intra-linguistic ambiguity seems equally unproblematic. Schiffer (1987: 120) holds that ambiguity is a serious issue for sententialists:

[29] These sentences might, moreover, be taken as cases in which the speaker is performing a form of mimics. On this, see §3.4.2.

> A sequence of mark and sounds can have more than one meaning and truth conditions even within a language, as we can see from the sentence 'visiting relatives can be boring'. The fact that the sentence may have different meanings … is a problem for the classic sententialist theory for the following reason ... the truth conditions of a belief are just those of the sentence believed. Thus the belief ascribed in a belief ascription would, unacceptably, have as many truth conditions as the sentence contained in the 'that'-clause.

But, firstly, it is not obvious that sentences are mere sequences of mark and sounds and, as we have seen, sententialists had better deny this. Secondly, and more importantly, on the account here suggested the belief is not the sentence denoted by a 'that'-clause; rather,

> Olga believes that visiting relatives can be boring

expresses that Olga believes something that we can represent with the sentence "Visiting relatives can be boring". Of course, many things can be represented by this sentence, and the *representans* does not individuate the thing believed, but this does not make Olga's belief such as to "have as many truth conditions as the sentence contained in the 'that'-clause". Put differently, the sentence is not what Olga believes, and so Olga's belief might be absolutely unambiguous. Thus this ambiguity objection does not really seem to hit sententialism, at least in the version suggested here.

CONCLUSION

Sententialism has generally been suggested as an account of propositional attitude sentences within a *logic* or *language of science*. With the aim in view of building at liberty a language, Carnap and Quine suggested sententialism, for they thought it had two main advantages over propositionalism. First of all, sententialism has been suggested because it can be easily combined with a *behaviouristic* approach to the mind. The reason is that it seems easy to move from believing a sentence to accepting it, i.e. from belief to linguistic behaviour. Secondly, Carnap and Quine thought that sentences are much better than propositions, because they are concrete material objects for which we have clear identity criteria which do not involve opaque notions. The sententialist account developed in this chapter has none of the *alleged* advantages Carnap and Quine found in a sententialist logic. First of all, we have seen that sententialism as an account of natural language cannot free itself from considerations of intentions and of the mind

as an extra-behavioural entity. As we saw while discussing Kripke's puzzles, sententialism is not an account of attitudes in terms of linguistic behaviour, so much so that it seems that sometimes, even if a subject assents to a sentence, we cannot use that very sentence to represent one of her beliefs. Secondly, as we have just seen, sententialists need to hold that sentences are necessary entities that have their meanings necessarily. Thus propositionalism, and the sententialist account here developed, seem on a par both ontologically and methodologically.

Moreover, given the way sententialism has been developed in this chapter, one might wonder whether in fact it makes much of a difference if one chooses propositionalism or sententialism. While according to the propositionalist, the 'that'-clause in

Olga believes that Cicero is smart

denotes what Olga believes, according to the sententialist it denotes a sentence that represents what Olga believes. The difference between propositionalism and sententialism is therefore the following: according to propositionalism, we are directly denoting the object of the attitude, while according to sententialism we are denoting something that represents the object of the attitude. Is there much of a difference between the two accounts? At first glance it seems that one would have some advantages and the other others, so that both can count as viable options.

Some have actually tried to combine the two accounts. For example, it has been suggested (King 2007) that the syntactic structure of a sentence is part of the proposition expressed by the sentence, or that 'that'-clauses denote *interpreted logical forms* (Larson & Ludlow 1993). Moreover, it has been argued (Santambrogio 2015: 297-299) that propositions are structured entities, composed of classes of co-denotational names and co-designational predicates. For example, given that in English there are two names for Cicero, i.e. 'Cicero' and 'Tully', the proposition expressed by

Cicero is Tully

can be represented as

<{'Cicero', 'Tully'}, {'='}, {'Cicero', 'Tully'}>.

It has, moreover, been suggested (Richard 1990: 137-141) that the objects of the attitudes are *Russellian annotated matrixes*, i.e. sentences together with the meanings of the words occurring in them. It has been argued that in uttering a propositional attitude sentence we are somehow talking about both a sentence and a proposition (Field 1978: 12; Fiengo & May 2006). Some

(Forbes 1993; Loar 1972; Recanati 2000: 132-134; 149-158) have advanced the idea that in propositional attitude sentences some linguistic items are somehow denoted, just as according to some the name 'Giorgione' is somehow denoted in

Giorgione was so-called because of his size.

Some, moreover, have found an important role for linguistic bits also within a Russellian view of propositional attitudes, according to which propositional attitude sentences express the holding of a three-place relation between a subject, a Russellian proposition, and a mode of presentation. Some have in fact suggested that Russellian accounts of this kind may profitably hold that even though 'that'-clauses denote Russellian propositions, names occurring in 'that'-clauses can help to nonreferentially determine the mode(s) of presentation somehow salient in the context of utterance (Crimmins 1992: 144-145; Kaplan 1989: 599; Predelli 2000: 461-465). Furthermore, others (Armour-Garb & Woodbridge 2012) suggest that language about attitudes is similar to a pretense-involving fictional talk. Thus a sentence like

Olga believes that Cicero is smart

is to be taken as similar to something like

Olga stole a pie from the oven

uttered during a mud-pie game. 'That'-clauses, they suggest, denote propositions only in the fictional context of the pretense game, while of course they do not really denote propositions, as a piece of mud is a pie only in the game. But what is the mud, in the case of the pretence of propositions? They suggest going somehow sententialist since they hold that it is "something sentence-like" (2012: 660).

But even if hybrid accounts are considered to possibly be correct and are among the options on the philosophical market, it is generally agreed that full-hearted sententialism, according to which 'that'-clauses simply denote sentences, not interpreted sentences or *also* sentences, is doomed. The opinion is so widespread that sententialism is often not even taken into consideration, or is simply quickly dismissed and the reasons why sententialism is considered doomed are two objections we still need to discuss, i.e. the famous Church translation argument and a problem pointed out by Schiffer. We will consider them in the next chapter.

3
'IN DEFENCE OF SENTENTIALISM'

In Chapter 1 we saw that it seems we had better endorse the theses

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;
(ST) 'That'-clauses are singular terms.

In Chapter 2 we developed an account that combined these theses with

(S) 'That'-clauses denote sentences.

According to the account, when we utter

Olga believes that Cicero is smart

we denote a sentence that represents what Olga believes, and we have seen that there are some reasons to take this sententialist account to be a viable alternative to the traditional propositionalist account, according to which in place of (S) we should maintain

(P) 'That'-clauses denote propositions.

As we have seen, sententialism seems able to deal with the notorious puzzles, seems to provide us with an interesting account of the contextual variations in the truth-value of propositional attitude sentences, and allows us to stay neutral on some difficult questions concerning what thoughts are.

Sententialism is generally considered to be doomed, though. The main reasons are the famous Church translation argument and a problem raised by Schiffer. Church thought that his argument may be an *insuperable objection* (1950: 97; 1951: 5); Schiffer urged that his problem shows that no sententialist account can be correct (1987: 111; 1990: 244) or, more mildly later

on, he maintained that he seriously doubts that his problem is surmountable (2003: 47), and this is the way in which the two criticisms are usually taken. Moreover, Church and Schiffer argue that their criticisms are directed against *any* sententialist account. Therefore, they are directed against the sententialist core thesis, i.e.

(S) 'That'-clauses denote sentences,

and not against other theses that can be held together with it. Thus any sententialist account needs to face the objections, and we cannot claim to have shown that the account suggested in the previous chapter is a viable account until we have shown that sententialists can survive these allegedly fatal objections. Showing that these objections do not in fact succeed in dooming sententialism is the aim of this chapter.

I will suggest that sententialists may answer both criticisms on the same grounds, i.e. by exploiting the recognition of what is simply an observation about language, and we will start from this observation. As we will see, the observation is simply that there is an obvious difference between the experience of listening to a sentence we understand and to a sentence we do not understand (§3.1). We will then see that if sententialists take the observation on board, they can reject Church's argument (§3.2) and solve Schiffer's problem (§3.3).

Moreover, I will show that sententialists may appeal to that very observation also in order to answer another problem, pointed out by Bach (§3.4.1). Bach's problem will allow us to consider indexicals, and we will see that, contrary to what has been sometimes held in the literature, sententialism can perfectly explain the behaviour of indexicals occurring in propositional attitude sentences (§3.4.2).

Having thus rescued sententialism for propositional attitude sentences like

Olga believes that Cicero is smart,

in the next chapter we will see how well sententialism can deal with other attributions, i.e. the so-called *wh-attributions*, such as

Jim wonders whether Rose likes flamingos.

3.1 AN IMPECCABLE OBSERVATION

Listening to a sentence we understand is different from listening to a sentence we do not understand. The difference is not just that when a subject listens to a sentence she understands, she understands it. It is also that, in normal cases, the subject cannot but immediately understand it. As Meckler (1956: 325) suggestively puts it,

> It is a long established habit of human beings to pluck out the meanings of phrases, whatever they may be, and devour them willy-nilly.

Recently, this observation has been the starting point of a debate connected with the question: do subjects *hear* meanings, i.e. is understanding a sentence part of the very auditory experience of hearing it? (O' Callaghan 2011). For the purpose of discussing Church's and Schiffer's objections, nothing as strong as a positive answer to the question is needed. What is needed is not an explanation of what happens, but simply recognizing that this is what happens. The observation that this is what happens is, as Smith puts it, "impeccable" (2009: 183): it simply reports a fact, i.e. the fact that we understand a sentence, if we can.

For our purposes, it is particularly important to recognize that this immediate understanding of expressions we can understand concerns also merely quoted expressions. However they work, it is clear that pure quotation marks are a linguistic tool with which we may speak about language itself. Nonetheless, they cannot block our understanding of what is within them, provided that we understand it. It is not just that quotation marks are such that we can work out what they quote and then understand it; it is that quotation marks are *iconic* (Recanati 2000: 14) in that the quoted material is displayed and so ready to be understood: you cannot say " 'Mary' " without saying 'Mary', you cannot listen to " 'Mary' " without listening to 'Mary'. Thus quotation is different from other mentioning devices that enable us to work out what the quoted item is, but in a non-straightforward way. Take for example the device recently discussed by Gaskin and Hill (2013: 206): letters are replaced by numbers, so that the letter 'a' is replaced by the numeral '1', the letter 'b' by the numeral '2', and so on; numerals are concatenated by the symbol '*', so that the name of the name 'Mary' is '13*1*18*25'. In a community in which this convention is shared, speakers are able to recover the name 'Mary' from '13*1*18*25', but this takes quite a bit of work. With usual quotation, on the other hand, the quoted material is displayed, and so is already there for the hearer to understand what it means, exactly as when it is used. For hearers listening to a quoted bit of language there is then some extra *free lunch*, and they usually cannot but *devour* it. That is why, for example, we tend not to quote rude words. For politeness, we tend to prefer something like 'F***', 'F_ _k' or 'the F word' and 'the four-letter word', or even 'cattle

truck', i.e. non-straightforward mention, to an explicit quotation (Predelli 2013: 83; Saka 1998: 121-126).[30] But for any rude word *x*, " '*x*' " is not rude, but a non-rude name of a rude word. Nonetheless, as in the present context, we avoid saying or writing it, because we know that speakers of English will immediately understand what is within quotes. That is why, moreover, in reading the title of this very chapter, " ' In Defence of Sententialism ' ", you in fact thought that you were going to read something about a defence, even if 'defence' occurs merely quoted in it. One might be tempted to hold here that quoted words are also used, and that is why we pluck out their meanings. But it should be noted that our tendency to devour meanings is so strong that, as Predelli (2013: 83, f. 6) and Hughes (1991: 19) remark, not even quotation is required, and thus it is irrelevant whether quotation prevents use. Accidental occurrence or strong similarity seem in fact to be enough. For example, Hughes (1991: 19) reports that 'donkey' appeared mysteriously when "[t]he time-honoured accepted synonym, *ass*, started to fall into disrepute through uncomfortable phonetic proximity to *arse*".

If sententialists are right in holding that 'that'-clauses denote sentences, it is clear that, as we have already seen in §2.1.1, 'that'-clauses are *iconic* too and thus display the sentences they denote. For hearers listening to a 'that'-clause there is then again some extra *free lunch*, and they usually cannot but *devour* it. As I will show below, this tendency of ours to devour meanings *willy-nilly* is all a sententialist needs to appeal to in order to answer both Church's translation argument and Schiffer's problem. So to Church's argument.

3.2 ON CHURCH'S TRANSLATION ARGUMENT

Church (1950; 1956a: 62; 1956b: 10-11; 1973: 365) presents his argument as primarily directed

[30] A real case that shows this practice is reported by Davis 1989: in 1987 *The Independent* printed an article which referred to a complaint made by the editor of *The Sun*, who was disconcerted by an article that *The Independent* had previously published that referred to a confrontation on the cricket field between the captain of England's cricket team and the Pakistani umpire. This incident culminated in the former allegedly calling the latter a 'fucking cheating cunt'. At the Press Council hearing, the editor of *The Sun* submitted that *The Independent* should have printed 'c...' instead of 'cunt'. As Davis 1989: 2 remarks, this real case "makes an interesting contrast with that of Sir William Emrys Williams in the Lady Chatterley trial. As a witness in his capacity both as a literary expert and a director of the defendant company, he claimed that to substitute asterisks for the four-letter words in D. H. Lawrence's novel 'would make the thing just a dirty book' ". The expert's opinion shows again that the iconic aspect of quotations makes a difference as to when we find it appropriate to use them, and exactly as people disagree on whether it is more vulgar to cover with a fig-leaf the nudities of statues or to leave them uncovered, so people disagree on whether it is more rude to display or to not display a rude word.

against Carnap's proposal (1934; 1947: 54-62). As we saw in §2.1.1, according to Carnap, roughly, Dave believes that snow is white, i.e. he is related to the sentence "Snow is white" iff he is disposed to an affirmative response to "Is snow white?" or to a translation of the question that he understands. As we have seen, this account incurs some objections, and we preferred a different sententialist account. But the account I suggested also needs to face the objection since, as Church himself remarks, his argument is directed against any kind of sententialism. Leaving aside any reference to Carnap's version of sententialism, Church's translation argument goes as follows:[31]

(CHURCH'S TRANSLATION ARGUMENT)

(C1)
According to sententialism,
  Dave believes that snow is white
is to be *analysed* along the following lines,
  Dave believes "Snow is white",[32]
where quotation marks are to be taken as devices of pure quotation;

(C2)
The Italian *translations* of the two English sentences are, respectively,
  Dave crede che la neve è bianca
  Dave crede "Snow is white";

(C3)
According to sententialists, the two Italian sentences are thus translations of sentences that stand in the analysis relation. If sententialists were right, the two Italian sentences would then have to *convey the same meaning*;

(DATUM)
But the two Italian sentences would obviously convey different meanings to a monolingual speaker of Italian;

[31] I follow the literature in attributing the objection to Church and in calling it the *translation argument*. But, first of all, as Baldwin 1990: 197 remarks, the translation argument would probably have to be more appropriately called *Moore's translation argument* (See his unpublished 1924-5 in 1966: 132-149). Secondly, as it has been remarked (Salmon 1995/2007: 356) and as it will become clear soon, the argument is not really about translation.

[32] We saw in §2.1.1 that this cannot be a correct analysis, since propositional attitude predicates are ambiguous and they have different meanings when followed by a 'that'-clause and a sentence in quotation marks. For ease, we can nonetheless forget this for the present purposes.

(CONCLUSION)
Therefore, contrary to sententialism,
Dave believes "Snow is white"
cannot be a semantic analysis of
Dave believes that snow is white.

Church merely outlines his argument. He provides neither a definition of *meaning*, nor of *adequate translation* or *analysis*. He does not say what it is for a sentence, or, better, for an utterance of a sentence, to *convey a meaning*, just as he does not justify the thesis that the translation of

Dave believes "Snow is white"

in Italian is

Dave crede "Snow is white"

and not, for example,

Dave crede "La neve è bianca",

in which what occurs within quotes also undergoes translation. In restating the argument in a different context, Church (1951: 6) also introduces the notion of *synonymy*, arguing that if sententialism were correct, the two Italian sentences

Dave crede che la neve è bianca
Dave crede "Snow is white"

would have to be synonymous. He maintains that synonymy is "to be tested by considering the information which each will convey" to monolingual speakers. But *information* is, again, an undefined notion.

The argument has been widely discussed, so widely that, arguably, all the logical space concerning these theses about translations and analyses has been filled by some paper or other.[33]

[33] The main different positions on the argument and on some reactions to it can be found in Anderson 1998: 138-143; Bealer 2002: 86; Burge 1978a; Carnap 1954; Cresswell 1980; Davidson 1963: 344-346; 1968: 135-136; Dummett 1981: 93-94; Field 2001: 160-162; Geach 1957: 87-92; 1972: 167-169; Higginbotham 1995: 123-125; 2006: 107-110; Kripke 1979: 277, f. 25; 2008: 185-186; Leeds 1979; Lewy 1976: 64-66; Ludwig & Ray 1998: 144-147; Meckler 1956: 325; Putnam 1954: 114-117; Quine 1956: 187;

But I will not attempt to establish whether there is such a thing as *the* correct translation of sentences like

Dave believes that snow is white
Dave believes "Snow is white"

or whether

Dave crede "Snow is white"

is *a* correct translation of

Dave believes "Snow is white",

nor will I take any stance on the criteria for an adequate analysis. For when we take on board the impeccable observation that speakers can immediately understand denoted sentences as a *free lunch,* I think there is no need to engage in such a discussion in order to answer the argument. Perhaps Church is wrong about translation and analysis. But, no matter how these notions have to be spelt out, and thus even if Church is right about them, there is a step in his argument that should be called into question.

Church in his argument remarks that

Dave crede che la neve è bianca
Dave crede "Snow is white"

would obviously convey different meanings to a monolingual speaker of Italian. He does not clarify what 'to convey' means here.[34] We may nonetheless accept his terminology and the intuitive idea behind it. What Church points out, just like our impeccable observation, is simply a datum, a fact about speakers and, as such, cannot be disputed. But from this Church concludes that, therefore, contrary to sententialism,

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1960: 213-218; Rescher 1960: 93-94; Richard 1990: 162-173; Salmon 1995/2007: 264-267; 2001; Scheffler 1954: 84-90.

[34] At least for historical reasons, it would clearly be wrong to take Church as meaning, by *what is conveyed*, the rich pragmatic notion we are used to nowadays, according to which, for example, the so-called *implicatures* are part of what a sentence conveys. According to my response, Church mistakenly conflates what is semantically encoded in a sentence and what the sentence conveys. Thus, the richer the notion of what is conveyed, the easier is the sententialist way out. In the main text, in relying on a poorer notion which is more faithful to what Church should have had in mind, I am therefore discussing the worst-case scenario for sententialists.

Dave believes "Snow is white",

in which the quotation marks should be taken as devices of pure quotation, cannot be a semantic analysis of

Dave believes that snow is white.

Sententialism being the thesis that in both

Dave believes that snow is white
Dave believes "Snow is white"

the sentence "Snow is white" is denoted, Church concludes that while in the second a sentence is denoted, this is not the case with the first. But, as we have seen, when it comes to quotation there is a difference between the denotations and what is conveyed. Take the following example: suppose that there are two perfectly competent speakers of English, and suppose they both listen to an utterance of

Dave said: "La neve è bianca".

They are competent, so they both understand the sentence. But let us suppose that only one of them is also a speaker of Italian. I think it should be admitted that the two speakers would have something different conveyed to them: only the bilingual speaker would understand the sentence quoted and thus know the content of what Dave said. In this case, obviously, the difference in what is conveyed cannot be due to some semantic characteristics of some sentences, because there is only one utterance of one sentence involved and the two speakers both perfectly understand it, being competent in English. Thus it should be recognized, and not just by sententialists but by everybody, Church included, that pure quotation creates cases, like the one just imagined, in which the difference in what is conveyed is due not to a difference in denotations, but also to the subjects understanding or not understanding the words quoted. What happens with the imagined case, a sententialist may well respond to Church, is what happens also with the sentences involved in his argument, since in them too some free lunch understanding is involved. This is, I think, the key idea a sententialist may employ in successfully replying to Church.[35] So let us see the details.

[35] Even if with different intentions and conclusions, since in the end he rejects both sententialism and propositionalism, this is also Meckler's 1956: 325 solution to Church's argument. To the best of my knowledge, Meckler is a forgotten hero, to whom no reference can be found in the discussions of

There are four sentences involved in the argument, i.e.

Dave believes that snow is white
Dave believes "Snow is white"
Dave crede che la neve è bianca
Dave crede "Snow is white".

Leaving aside the notions of *analysis* and *translation*, but taking on board our impeccable observation, the following are the relevant relations a sententialist takes these sentences to stand in with each other. For what concerns

Dave believes that snow is white
Dave believes "Snow is white"

sententialism is the thesis that in both the very same English sentence "Snow is white" is denoted. So, according to sententialism, in neither is the content of Dave's belief denoted, but a speaker of English listening to an utterance of the English quoted sentence will immediately understand what it means and have the content immediately conveyed to her. As for

Dave believes that snow is white
Dave believes "Snow is white"

and

Dave crede che la neve è bianca,

the first two and the third obviously belong to different languages. According to sententialism, in the former English sentences an English sentence is denoted, while in the Italian sentence an Italian sentence is denoted. Even if the content of Dave's belief is not denoted in any of the sentences, an utterance of each sentence conveys such a content to the speakers of the language the sentence belongs to. In the English sentences an English sentence is quoted, and English speakers understand it, while in the Italian sentence an Italian sentence is quoted, and Italian speakers understand it. The sentences

Dave believes that snow is white
Dave believes "Snow is white"

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sententialism and propositionalism. Also Leeds 1979: 46, although with different conclusions, suggests something along the same lines.

and

Dave crede "Snow is white"

again belong to different languages, but in all the English sentence "Snow is white" is denoted. Since in the English sentences an English sentence is denoted, English speakers listening to an utterance of either of the two will understand the English sentence, and will immediately have conveyed to them the content of Dave's belief. This is not what happens with monolingual speakers of Italian listening to an utterance of the Italian sentence: since an English sentence is denoted, a monolingual speaker of Italian will not understand it, and there will therefore be no additional *free lunch* understanding. These two triplets of sentences show that when two languages and quotation are involved, given that we understand a quoted sentence if, but only if, we can, there is a trade-off between preservation of denotations and preservation of what is conveyed: if denotations are preserved, as in the second triplet, there is a loss of what is conveyed; if, on the other hand, what is conveyed is preserved, denotations have to change.

In passing, it should be noted that the trade-off between denotations and what is conveyed that we have in the case of quotation is not completely *sui generis*. Another is the trade-off between denotations and self-reference that we have in the case of self-referential sentences (Burge 1978a; Hart 1970): take

This very utterance is true

as uttered at time *t*. At time *t'*, we may have two utterances:

The utterance made at *t* is true

which preserves the denotation to the utterance made at *t*, but is not self-referential, and

This very utterance is true

which preserves the self-referential aspect of the original utterance, but in which the utterance made at *t'* is denoted, and not the utterance made at *t*.[36]

[36] Burge 1978a relies on the trade-off between denotation and self-reference in his answer to Church's argument and in fact holds that propositional attitude sentences are self-referential. Since with quotation there is in any event a trade-off between preservation of denotations and preservation of what is conveyed, holding that the sentence is self-referential is redundant. This seems an advantage, also considering that propositional attitude sentences really do not look self-referential.

Now to the two sentences directly involved in one of the steps of Church's argument, i.e.

(DATUM)
But the two Italian sentences
  Dave crede che la neve è bianca
  Dave crede "Snow is white"
would obviously convey different meanings to a monolingual speaker of Italian.

For sententialists, while in the first the Italian sentence "La neve è bianca" is denoted, in the second the English sentence "Snow is white" is denoted. Thus for sententialists there is a semantic difference between the two sentences. Moreover, utterances of the two sentences are different also concerning what they convey to the monolingual speakers of Italian: even if in the first the content of Dave's belief is not denoted, a monolingual speaker of Italian listening to an utterance of it will *willy-nilly* understand the quoted sentence, and thus have that content immediately conveyed to her. With the second sentence, on the other hand, since an English sentence is denoted, a monolingual speaker of Italian will not understand the quoted sentence and thus will have no idea what Dave believes. Thus sententialists, with Church, recognize the datum that the two Italian sentences would obviously convey different meanings to a monolingual speaker of Italian. Sententialists cannot deny this. Like ours, this also is an impeccable observation, simply a fact about speakers. But here is where sententialists may and should disagree with Church. From the datum, Church concludes:

(CONCLUSION)
Therefore, contrary to sententialism,
  Dave believes "Snow is white"
cannot be a semantic analysis of
  Dave believes that snow is white.

Leaving out again the notion of *analysis*, what Church concludes is that sententialism cannot be correct. Sententialism is the thesis that in both

Dave believes that snow is white
Dave believes "Snow is white"

the sentence "Snow is white" is denoted. Thus, from what two utterances of two sentences *convey*, Church concludes what the *denotations* of the two other sentences are. Church's argument has the following structure. There are two sentences whose utterances convey the same. Suppose these two sentences have the same denotations. Then take a third sentence whose

utterances convey the same as the first, and a fourth having the same denotations as the second. Since the third and the fourth are different in what their utterances convey, the first and the second sentences should have different denotations. But this, as we just saw, is a *non sequitur*. When it comes to quoted sentences, preservation of denotations and preservation of what is conveyed by uttering the sentences do not go together, as Church holds, but there is instead a trade-off: if you pick the denotation-preserving sentence, you pick one whose utterances convey something different, and vice versa. In picking the third and fourth sentences, as Church does, we end up with a sentence preserving denotations but whose utterances convey something different from the original ones, and a sentence whose utterances preserve what is conveyed by utterances of the original ones but having different denotations. It is therefore in accordance with, and not in opposition to, sententialism that these two sentences are such that their utterances convey something different, as they obviously do. Therefore the fact that

Dave crede che la neve è bianca
Dave crede "Snow is white"

differ as to what their utterances convey does not show, contrary to what Church urges, that

Dave believes that snow is white
Dave believes "Snow is white"

differ in their denotations. Instead, it is in perfect accordance with sententialists, who take on board the impeccable observation and so the claim that if denotations are preserved, what is conveyed is not. Therefore, in taking the impeccable observation into account, I think sententialists may well conclude, *pace* Church, that his argument is not, after all, a *fatal objection*.

Before moving to Schiffer's problem, we can note that in discussing, and defending, Church's argument, Salmon (2001: 363-364. See also Salmon 1995/2007: 264-267) holds:

> the main point of the Church Translation Argument is ... The 'that'-clause in English expressions like
>
> Chris believes that the earth is round
>
> ... carries with it a special way of conceptualizing the content of the sentence following 'that', an identifying way of thinking of the proposition which constitutes acquaintance rather than mere knowledge by description.

It is not clear what 'acquaintance' should be taken to mean here. But, apart from this, sententialists in fact have the resources to hold that, however acquaintance is exactly to be defined, it is also the case that a hearer of a propositional attitude sentence gets acquainted with the content of the attitude. For as we saw in §2.3, even though, according to sententialism, 'that'-clauses and marks of pure quotation are both devices for denoting sentences, sententialists can recognize that they are different devices. In particular, a complement clause typically cannot be in a language different from the language of the whole sentence. Thus typically in English, after the 'that' we have an English sentence. Even if according to sententialism 'that'-clauses denote sentences and not contents, that denoted sentence therefore belongs to a language known to the hearer of the English attribution. The content is always there as a free lunch for the hearer, a lunch that is usually immediately devoured, *willy-nilly*. Thus, contrary to what Salmon holds, sententialists can hold that 'that'-clauses *carry with them a special way of conceptualizing the content of the sentence following 'that'*, in that they always make such a content available to be devoured. As we will see, these considerations will be relevant also in discussing Schiffer's problem. Let us then move to it.

3.3 ON SCHIFFER'S PROBLEM

Schiffer's (1987: 133-135; 1990: 245; 2003: 47; 2008: 289) primary polemical target is Davidson's paratactic account (1968). The account suggested here does not endorse the paratactic aspect of Davidson's account. For while according to the account suggested here, it follows from

(ST) 'That'-clauses are singular terms,

that 'that'-clauses are syntactic units, for Davidson (1968:142) 'that'-clauses are not syntactic units:

> sentences in indirect discourse, as it happens, wear their logical form on their sleeves (except for one small point). They consist of an expression referring to a speaker, the two-place predicate 'said', and a demonstrative referring to an utterance. Period. What follows gives the content of the subject's saying, but has no logical or semantic connection with the original attribution of a saying.

Thus according to Davidson

Dave believes that snow is white

is to be taken as tantamount to

Dave believes that. Snow is white.

This account is obviously subject to the objections seen in §1.2.1, and we have concluded that, if possible, it is better not to endorse an account like this.

But like Church, Schiffer also explicitly considers his problem as able to *infect* any kind of sententialism (2008: 289), so the account suggested here also needs to face it. Setting aside any reference to the paratactic aspect of Davidson's proposal, the problem we now need to face goes as follows:

(SCHIFFER'S PROBLEM)

(S1)
According to sententialism, in both
Dave believes that snow is white
Dave believes "Snow is white"
the sentence "Snow is white" is denoted, and in both it is said that Dave believes it. Thus for sententialists knowing what the first asserts can require nothing more and nothing less than knowing what the second asserts;

(S2)
Sententialists are then forced to hold that if
Zoltan knows that Dave believes "Snow is white"
is true, so is
Zoltan knows that Dave believes that snow is white;

(S3)
If Zoltan is a monolingual speaker of Hungarian and is only told that Dave believes the English sentence "Snow is white",
Zoltan knows that Dave believes "Snow is white"
is true. According to sententialism so is
Zoltan knows that Dave believes that snow is white;

(S4)

Zoltan does not understand the English sentence, thus according to sententialism

Zoltan knows that Dave believes that snow is white

can be true even if Zoltan does not know what Dave believes, the content of his belief;

(DATUM)

One cannot know the *assertion made*, the truth stated, by

Dave believes that snow is white

without knowing *what* Dave believes, the *content* of his belief;

(CONCLUSION)

Sententialism is false, since it is in conflict with the datum.

Before presenting what I think is the best solution sententialists can offer for the problem, we should note that when presenting his problem, Schiffer always phrases his datum in the way just seen (1987: 133; 1990: 245; 2003: 47; 2008: 289): one cannot know the *assertion made*, the truth stated, by

Dave believes that snow is white

without knowing *what* Dave believes, the *content* of his belief. I think it should be recognized that it is far from obvious what this convoluted sentence means and how to rephrase it in a less convoluted way. For example, it is not obvious what *knowing the content* means. Sainsbury (2002: 189), for example, holds that knowledge of meaning is a form of knowledge-*how* and is tantamount to being able to answer to the question "What does it mean?". One might hold that knowing what Dave believes is being able to answer the question "What does he believe?", and Schiffer does not show what an adequate answer would be; but this is obviously crucially at stake in the problem. For Zoltan is able to provide the following answer:

Dave believes something that we can represent with "Snow is white".

Why is this inadequate, as an answer? Schiffer does not say. Moreover, there is a worry that in spelling it out differently, the datum would make the problem question-begging: is Schiffer holding that in asserting

Dave believes that snow is white

the content of Dave's belief is denoted? If this is the case, then the problem is assuming what it is trying to show: the problem is in fact designed to show that sententialism, according to which content is not denoted, is false. Another less convoluted formulation of something similar to Schiffer's datum can be found in Recanati (2000: 10): "One cannot entertain the thought that John believes that grass is green without entertaining the thought that grass is green". Baldwin (1990: 198) also holds something that goes in the same direction: "Anyone who understands the sentence 'Brutus believes that Caesar is dead' must understand the sentence 'Caesar is dead'". Is Schiffer holding what Recanati or Baldwin hold? I do not think it is clear. These seem to me serious issues for the problem, but I will leave them aside. Since it is the worst case for sententialists, I will assume that Schiffer's problem is not question-begging and that the datum it relies on is not to be simply dismissed.

So how can sententialists solve the problem, without calling the datum into question? Clearly, Church's argument and Schiffer's problem are tightly connected. Nevertheless, they rely on different assumptions and so answering the two criticisms amounts to discussing different theses. Still, I suggest, sententialists may also answer this problem by exploiting the observation seen above about language and speakers. Nonetheless, while sententialists are able to simply deny that in Church's argument the conclusion follows from the premises, for Schiffer's problem, as we will immediately see, sententialists need instead to build a more sophisticated answer, which is composed of of various steps. We will see each in detail below, but let us start with a sketch. Schiffer takes the monolingual speaker of Hungarian, Zoltan, to show that according to sententialism it is possible to know that Dave believes that snow is white without knowing the content of Dave's belief. I think that full-hearted sententialists are forced to admit that Schiffer is right on this. Sententialists can nonetheless show that, contrary to what Schiffer thinks, this is a surmountable problem. First of all, in fact, they can show that it is an exotic case, which has no bearing on the usual sentences we use, in the various natural languages, to speak about other subjects' attitudes. But this is still not a fully satisfactory answer. For whatever happens with natural languages, one may still take Zoltan as showing that holding that propositions are denoted in propositional attitude sentences is better off than holding that sentences are denoted. But sententialists have a reply here as well. They may show that either propositionalists also fall victim to Schiffer's problem, or they need to face, so to say, their own problematic case, i.e. the ignorant of particle physics but enthusiastic Luisa. And then sententialists may well say that propositionalism does not look such a better option than sententialism and that sententialism is still in a good shape. So, to the details.

According to

(S2)
Sententialists are forced to hold that if
Zoltan knows that Dave believes "Snow is white"
is true, so is
Zoltan knows that Dave believes that snow is white,

sententialists are forced to hold that the sentences

Zoltan knows that Dave believes that snow is white
Zoltan knows that Dave believes "Snow is white"

have the same truth-conditions. From this, as Schiffer shows with his case of the Hungarian monolingual Zoltan, it follows that sententialism is in conflict with the following datum

(DATUM)
One cannot know the *assertion made*, the truth stated, by
Dave believes that snow is white
without knowing *what* Dave believes, the content of his belief

A sententialist may then try to deny that she is forced to hold that

Zoltan knows that Dave believes that snow is white
Zoltan knows that Dave believes "Snow is white"

have the same truth-conditions, and this is in fact exactly what Higginbotham (2006) suggested. But I think that solving the problem in this way constitutes a departure from sententialism, and not a defence of it. According to Higginbotham,

Zoltan knows that Dave believes that snow is white

is true iff there is something Zoltan knows which *matches in content* with

Dave believes that snow is white,

while

Zoltan knows that Dave believes "Snow is white"

is true iff there is something Zoltan knows which *matches in content* with

Dave believes "Snow is white".

Thus, he maintains, in order for the two attributions concerning Zoltan to have the same truth-conditions,

Dave believes that snow is white
Dave believes "Snow is white"

should *match in content*, but, he argues, they do not, "because the relation of content-matching intervenes, and distinguishes (as it should)" (2006: 111). Higginbotham does not define the relation of *matching in content*, but it seems to me that any definition according to which the two sentences do not *match in content* counts as a departure from sententialism. As Schiffer remarks,

> (S1)
> According to sententialism, in both
> Dave believes that snow is white
> Dave believes "Snow is white"
> the sentence "Snow is white" is denoted, and in both it is said that Dave believes it. Thus for sententialists knowing what the first asserts can require nothing more and nothing less than knowing what the second asserts.

Thus full-hearted sententialists are forced to say that knowing what

Dave believes that snow is white

asserts can require nothing more and nothing less than knowing what

Dave believes "Snow is white"

asserts.[37] Full-hearted sententialists should then agree with Schiffer on (S1) and then on

[37] Ludwig 2014 has similarly recently suggested a non-full-hearted sententialism: he remarks that "['that snow is white'] refers to a sentence but its semantic function is not exhausted by the fact that it refers to ['Snow is white'] as in the case of the classical account of quotation names" (2014: 744). I instead consider sententialism as the thesis that, semantically, the that-clause 'that snow is white' simply denotes the sentence "Snow is white". I think this is an advantage. What would the semantic difference be? Ludwig only remarks that "[o]ne can understand a quotation name without understanding the expression it names. However, one cannot understand the noun phrase ['that snow is white'] unless one understands ['Snow is white']" (744). I find it difficult to see how this alleged extra function may make it enclosed

(S4)

Zoltan does not understand the English sentence, thus according to sententialism

Zoltan knows that Dave believes that snow is white

can be true even if Zoltan does not know *what* Dave believes, the *content* of his belief.

Schiffer urged that his problem shows that no sententialist account can be correct (1987: 111; 1990: 244) or, more mildly later on, he maintained that he seriously doubts that his problem is surmountable (2003: 47). But sententialists can show that they may surmount it in the following way.

Propositional attitude sentences belonging to the various natural languages are used by the speakers of those languages in order to speak about attitudes and the contents of those attitudes. This certainly seems a datum. But this datum is perfectly accounted for by sententialists, as soon as we take on board the impeccable observation that speakers of a language, or *plain people*, as Schiffer call them (1987: 137), typically understand its sentences. According to propositionalism, when provided with utterances of sentences like

Dave believes that snow is white

Zoltan knows that Dave believes that snow is white

English speakers know the contents of the ascribed attitudes because those contents are denoted. According to sententialists, instead, those contents are conveyed without being denoted. The denoted sentences are understood because they belong to the very language of the reports, thus to the language known to the speaker. This, as we have already seen, is what typically happens with propositional attitude sentences belonging to our natural languages: typically, a complement clause belongs to the language of the whole sentence. Thus typically we speak about a subject's attitude in a way that allows the *free lunch understanding* of the content of that attitude. Sententialism is a theory about the semantics of English, in whose propositional attitude sentences, typically, English 'that'-clauses occur. Thus sententialists may take Schiffer's problem as not a serious one in that it concerns an exotic case, which has no bearing on what happens with the usual sentences we use in English to speak about other subjects' attitudes.

But this defence may not be enough. A propositionalist would still be unsatisfied. According to propositionalism, if we know the truth stated by

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semantically that the denotation should be understood. Of course, given our impeccable observation, more may be conveyed to her. But this is exactly what happens also with pure quotation: English speakers usually cannot but understand the phrase merely quoted by the merely quotational name ' 'Pierre's friend Zoltan' '.

Dave believes that snow is white

we always know the content of Dave's belief. Thus, even if the usual natural language sentences do not lead to a conflict between sententialism and knowledge of the content of the attitude, still Zoltan shows, however exotic a case it is, that in this case sententialism does indeed lead to a conflict. So propositionalists may still claim, given Zoltan, to have a better account.

I think that here sententialists should react as follows. Obviously, Schiffer's problem can support the claim that propositionalism is a better account only if propositionalism does not itself fall victim to a similar problem. But then propositionalists need to put some constraints on the notion of *grasping a proposition*. Propositionalists take

Dave believes that snow is white

as denoting the proposition *that snow is white*. For them, propositions are contents, and in knowing the truth stated by the sentence we know the content of Dave's belief, i.e., as propositionalists usually put it, we *grasp that proposition*. Unfortunately, Schiffer does not develop these notions, limiting himself to stating that knowing what Dave believes includes, firstly, knowing that he has a belief that is true if, and only if, snow is white and, secondly, knowing that it is about snow and whiteness (1987: 133; 2008: 289). This does not help much: what is it for a content to be *about* something?

But, luckily, there is no need to spell all these notions out. For it suffices to notice that with the aim in view of claiming that propositionalism is better than sententialism, propositionalism cannot be combined with so-called *consumerism*. According to consumerism, as Kaplan (1989: 603-604) puts it,

> we can *acquire* meanings through the instrument of language ... we succeed in thinking about things in the world not only through the mental residue of that which we ourselves experience, but also vicariously, through the symbolic resources that come to us through our language. It is the latter – *vocabulary power* – that gives us our apprehensive advantage over the nonlinguistic animals. My dog, being color-blind, cannot entertain the thought that I am wearing a red shirt. But my color-blind colleague can entertain even the thought that Aristotle wore a red shirt.

Similarly, Millikan (1998: 64-65) holds:

> It is even possible, indeed it is common, to have a substance concept entirely through the medium of language, that is, in the absence of any ability to recognize the substance in the flesh. For most of us, that is how we have a concept of Aristotle, of molybdenum, and, say, of African dormice. There, I just handed you a concept of African dormice, in case you had none before.

Now imagine this scenario: Luisa is an English speaker and, like many of us, has no idea what particle physics is. She is now listening to a conference delivered by Professor Higgs. Higgs has just said the following:

> The Standard Model of particle physics rests on the existence of the Higgs boson.

According to consumerism, Luisa may, although vicariously, grasp the proposition *that the Standard Model of particle physics rests on the existence of the Higgs boson*. But, if that is so, why cannot the English sentence "Snow is white" do the same job for Zoltan, the monolingual speaker of Hungarian, as what Higgs just said does for Luisa? There seem to be no good reasons why we can vicariously grasp a proposition *only if* the symbols belong to a language we generally understand, but not when it comes to the relevant symbols (Mercier 1994: 504-506). Thus if Higgs's utterance can work for Luisa, the English sentence can work for Zoltan too. Therefore, if consumerism is endorsed, even according to propositionalism Zoltan, in knowing that Dave believes the proposition expressed by the sentence "Snow is white" can, even if vicariously, grasp the proposition that snow is white and thus know what Dave believes. Zoltan is therefore a point in favour of propositionalism only if propositionalists discard consumerism.

May propositionalists simply reject consumerism? There is no need to establish here whether consumerism is correct. For it seems that even if consumerism is rejected, propositionalism is not in a better position than sententialism. For let us see what happens if consumerism is rejected. If consumerism is rejected, Luisa cannot grasp the proposition *that the Standard Model of particle physics rests on the existence of the Higgs boson* vicariously. But there seems to be no other way in which she can grasp it. She does not know anything about particle physics, and for her Higgs's words are but empty placeholders. However the notion of *grasping a proposition* is to be exactly cashed out, if consumerism is rejected Luisa does not grasp the proposition expressed by Higgs's words. But then the following sentence uttered by Luisa herself,

> Luisa: I think that Higgs believes that the Standard Model of particle physics rests on the existence of the Higgs boson,

becomes problematic. Luisa is listening to Higgs, and she takes him as sincere and so thinks that Higgs believes what he said. He said that the Standard Model of particle physics rests on the

existence of the Higgs boson, and thus the self-attribution seems true.[38] But Luisa cannot grasp the proposition *that Higgs believes that the Standard Model of particle physics rests on the existence of the Higgs boson*, because, if consumerism is rejected, she does not grasp it, in that she does not grasp the proposition *that the Standard Model of particle physics rests on the existence of the Higgs boson*. If propositionalists here say that it is possible to grasp a proposition about another proposition without grasping the latter, then Zoltan looms again: even if Zoltan does not grasp the proposition *that snow is white*, he can grasp the proposition *that Dave believes that snow is white* and thereby know what Dave believes. So, if propositionalists avoid Zoltan, the following

> Luisa: I think that Higgs believes that the Standard Model of particle physics rests on the existence of the Higgs boson

comes out false.

What is Luisa thinking, then? A propositionalist may say that since Luisa does not grasp the proposition, Luisa's belief is a case of metalinguistic thought (Donnellan 1993: 165-168; Sperber 1985: 49-59), i.e. that her true self-attribution is actually tantamount to something like

> Luisa: I think that Higgs believes that "the Standard Model of particle physics rests on the existence of the Higgs boson".

But if propositionalists allow for some ascriptions to be metalinguistic, there seem to be other difficulties: what exactly is the relation between a metalinguistic belief and the corresponding non-metalinguistic one? Take Luisa again. During the conference, she is intrigued by what Higgs says. She wants to discover herself whether Higgs is right, and so she decides to study physics.

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[38] This example relies on what Luisa can think *Higgs* believes, not on what *Luisa* believes about the Standard Model of particle physics. But one can venture even further by relying on the notion of *knowledge by testimony*. For example, Pap 1949: 53, f. 1 asks "Why could I not … 'know' that the various analyses contained in a dictionary are correct, viz. by inference from the semantic erudition of the dictionary maker?". The example I employ is weaker, since one can hold that Luisa can think that Higgs believes that the Standard Model of particle physics rests on the existence of the Higgs boson, while holding that for her to believe something about particle physics something else that what she heard is needed.
In discussing Schiffer's problem, Lepore & Lower 1989 suggest a solution along the following lines: taking an utterance of a sentence like

Higgs believes that the Standard Model of particle physics rests on the existence of the Higgs boson

as uttered by Luisa, they say that "[t]here seems to us to be nothing preventing all of [Luisa]'s utterances from being true, contrary to the assumption that underlies the objection" (351-352). Even if their answer to the problem may be taken to go in same direction as the answer suggested here, there is a crucial difference: they argue that Luisa's report can be true even if she does not know the content of the belief. Thus according to them Schiffer's objection relies on the thesis that a report cannot be *true* if the reporter does not know the content of the attitude reported. This is not how I interpret Schiffer. I think the thesis they discuss is too obviously false – what Luisa knows makes no difference to what Higgs believes! – to take Schiffer to rely on it. I take Schiffer as holding the much more plausible thesis that the truth stated by a report cannot be *known* by a subject if she does not know the content of the attitude reported.

Now years have passed since Higgs's conference, and Luisa is now an expert on particle physics. Sententialism can explain what happened as follows: at the conference, Luisa takes "The Standard Model of particle physics rests on the existence of the Higgs boson" as a representation of a belief of Higgs's. According to sententialism, this is nothing but for her to be in a position to say

> Luisa: I think that Higgs believes that the Standard Model of particle physics rests on the existence of the Higgs boson

so that the self-attribution is true.[39] Surely, at the conference, "The Standard Model of particle physics rests on the existence of the Higgs boson" conveyed virtually nothing to Luisa. But since that time she had more conveyed to her, and now that sentence perfectly conveys to her the content of Higgs's belief. She thus spent her career in understanding the sentence better and better, and the more she understood, the better she knew what Higgs believes.

Propositionalists who reject consumerism need to explain what happened to Luisa differently. According to them, it seems, Luisa at the conference formed a metalinguistic thought. But she is now an expert on bosons so that she now presumably has a full grasp of the proposition *that the Standard Model of particle physics rests on the existence of the Higgs boson*. So there are two beliefs, one metalinguistic and the other propositional, and Luisa moved from the one to the other. But when exactly did that happen, when did she acquire the propositional belief? It seems impossible to find any non-arbitrary answer (Recanati 2000: 270-285). This lack of a candidate for the point at which the new belief is acquired seems a strong signal that Luisa did not actually change attitude at all, but formed a thought at the conference, and kept on simply retaining it, while understanding things better and better. In fact, she would probably say

> Luisa: Since that conference I have thought that Higgs believes that the Standard Model of particle physics rests on the existence of the Higgs boson. That was actually the reason why I decided to become a physicist

and we would take her as correct. That the attitude was always the same can be held by both sententialists and consumerists, but not by propositionalists who reject consumerism. Thus, if propositionalists are safe from Zoltan, they are not safe from Luisa.

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[39] One can even add that also our attribution

> Luisa thinks that Higgs believes that the Standard Model of particle physics rests on the existence of the Higgs boson

is true, but that would require us to be able to use "Higgs believes that the Standard Model of particle physics rests on the existence of the Higgs boson" to represent a belief of Luisa, and that is less obvious. Nonetheless, the self-attribution which is much less controversial is already problematic for non-consumerist propositionalists.

Propositionalism, therefore, does not seem to be in a better position than the one sententialism is in. It is true that sententialists need to face Zoltan, but having Zoltan who knows nothing about what a subject believes allows us to explain what gradually happened to Luisa. This seems welcome, especially considering that sentences like those Luisa would utter belong to the way in which we usually speak, *in our natural languages*, about what we believe. There is also another reason for why the case of Luisa does not seem exotic at all: for all of us there are so many territories in which we are just like her.

This is, I think, a fully adequate answer to Schiffer's problem.[40] Also in this answer, a crucial role is played by the impeccable observation that speakers understand the sentences they can understand, even if not used. As I will immediately show, this impeccable observation is a useful resource that sententialists may exploit in answering another criticism.

3.4 BACH'S MYSTERY AND INDEXICALS

So far, we have not considered the behaviour of indexicals and pronouns in propositional attitude sentences, and so we still need to assess two problems that these bits of language are taken to create for a sententialist account: the problem, pointed out by Bach (1997:218), that if we embrace sententialism it becomes mysterious how the denotations of some anaphoric pronouns are secured, and, second, the problem that indexicals seem to show that words occurring in 'that'-clauses are used, contrary to sententialism. Let us start from Bach's mystery.

[40] Ludwig 2014 likewise suggests we answer Schiffer's problem by showing that propositionalism is no better off. Ludwig holds that propositionalists also have to face Zoltan because according to them if

Zoltan knows that Pierre believes Dthat the proposition expressed by "Snow is white"

is true, so is

Zoltan knows that Pierre believes that snow is white.

But a propositionalist may answer that the two terms that follow 'believes', although co-denotational, do not make the same contribution in the propositions expressed by what follow 'knows', so that in the two Zoltan is related to different propositions, and he may well know one but not the other. The easiest way of holding this is to go Fregean: propositions are made of senses, not references, and the senses are different. Unfortunately, Ludwig 2014: 749 admits that he does not have knockdown arguments against this propositionalist account. I think that, in order to discard the possibility that propositionalism is better than sententialism, we should also rely, as I do in my answer, on the case of Luisa, which seems problematic for propositionalists, no matter whether senses or other propositionalist strategies solve Zoltan.

3.4.1 ON BACH'S MYSTERY

According to Bach (1997: 218), sentences like

> Immediately after Emanuel realized that Laura was not at home, she arrived

create a problem for sententialism, because how the denotation of 'she' is secured becomes "something of a mystery" (1997: 218). Making all the assumptions explicit, the problem raised by Bach is the following:

> (BACH'S MYSTERY)
>
> (B1)
> The pronoun 'she' occurring in
> Immediately after Emanuel realized that Laura was not at home, she arrived
> is anaphoric for 'Laura': it denotes what 'Laura' denotes
>
> (B2)
> According to sententialism, 'Laura' does not denote Laura
>
> (CONCLUSION)
> Sententialism makes it mysterious how 'she' can denote Laura.

I think that sententialists may simply dismiss this problem. They have a very cheap answer. They may start by saying that in general it is not clear what anaphora is. Anaphora may be characterized as the phenomenon whereby "an occurrence of an expression has its referent supplied by an occurrence of some other expression" (King 2013). Although this characterization may provide us with an intuitive grasp of the phenomenon, it is clear that at a closer look it is at best just a rough characterization: what is it for an occurrence of one term to *supply reference* for the occurrence of another term? Allowing themselves to use this sloppy terminology for the sake of argument, sententialists may say that if anaphora is so characterized, then it is not sententialism that is responsible for the mystery, for there are endless other cases similar in the relevant respect which do not involve propositional attitude sentences (Sainsbury 2005: 128). One case of what is usually called *sloppy anaphora* is the following:

> *A mosquito* is buzzing around our room. In fact there are hundreds of *them*. *They* are annoying.

Even if 'a mosquito', 'them' and 'they' are not, and indeed cannot, be co-denotational, it is nonetheless clear that 'a mosquito' may be taken *to supply reference* for 'they', or, as Lewis (1979:

350) puts it, *to pave the way for referring expressions that follow*, and this is all the anaphoric phenomenon is supposed to be about. How it works that 'they' has denotation so supplied is no less mysterious than how in

Immediately after Emanuel realized that Laura was not at home, she arrived

'she' may denote Laura even if 'Laura' and 'she' are not co-denotational.

I take this as a proper answer to Bach's mystery. But I also think that sententialists may provide a more engaging answer, in which they do not limit themselves to showing other mysteries, but try to make the mystery a bit less esoteric. Bach's problem may be rephrased as follows, with the help of a comparison: whatever exactly anaphora is, in both the following sentences,

Immediately after Emanuel realized that Laura was not at home, she arrived,
When Baptiste woke up, Laura was not at home, but she arrived immediately after

'she' seems to denote Laura on the basis of the same mechanism. The most intuitive way to explain how 'she' denotes Laura is to hold, in accordance with

(B1)
The pronoun 'she' occurring in
Immediately after Emanuel realized that Laura was not at home, she arrived
is anaphoric for 'Laura': it denotes what 'Laura' denotes,

that in both sentences the following mechanism is at work: 'she' denotes Laura because it is somehow semantically encoded in the sentences that the pronoun denotes whatever the name 'Laura' denotes; 'Laura' denotes Laura, and this is why 'she' denotes Laura as well. As Bach notices in

(B2)
According to sententialism, 'Laura' does not denote Laura,

this homogeneous explanation is clearly not available to sententialists. For they cannot maintain that in

Immediately after Emanuel realized that Laura was not at home, she arrived

'Laura' denotes Laura, since denying that is part of what sententialism amounts to. Thus sententialists need to provide a different explanation. This is what I think the alternative sententialist explanation may look like. Sententialists may again appeal to the impeccable observation that speakers of a language typically understand words and sentences of that language, and hold that the fact that Laura is the denotation of 'she' in

Immediately after Emanuel realized that Laura was not at home, she arrived

should be explained in the same way in which the denotation of an obviously non-anaphoric occurrence of 'she' is usually explained. Leaving aside problematic cases, such as those in which no female or too many females are salient, in a usual case of a non-anaphoric 'she', the pronoun semantically denotes the salient female in the context. Thus, with an utterance of a sentence like

She arrived

uttered in isolation in a context in which Laura has been pointed to, the context provides us with the denotation of the pronoun: 'she' denotes Laura because she is the salient woman in the context. For a sententialist this is also what happens with

Immediately after Emanuel realized that Laura was not at home, she arrived.

The pronoun 'she' semantically denotes, as usual, the salient woman in the context. Things are salient in a context for many different reasons. A speaker may point to something, something may simply be the only thing around of the right kind. Also what has been said has a role here. If the speaker has already spoken about Laura, she may after a few sentences use

She arrived

to denote her again, and the hearer will, in the normal cases, understand this. But denoting is actually not necessary: even if the speaker merely mentions the name 'Laura', she may nonetheless take for granted that for a hearer this is not just a cluster of meaningless sounds. Thus the speaker may use

She arrived

to denote Laura, even if Laura has not been previously denoted. When the hearer listens to the 'she' occurring in

Immediately after Emanuel realized that Laura was not at home, she arrived,

she has already listened to the sentence "Laura was not at home". Since she immediately understood the sentence, she understood the name 'Laura' as if it were used. For her, whoever the name 'Laura' would have denoted in isolation is salient.[41] Since 'she', as usual, semantically denotes the salient female in the context, for the hearer it therefore denotes whoever 'Laura' would denote in isolation, i.e. Laura.

This is of course the simplest case. Things get more complicated when more than one female is salient, for different reasons. But it should be noted that with

Immediately after Emanuel realized that Laura was not at home, she arrived,

the salience of the woman called 'Laura' is always there, because the name 'Laura' occurs in that very sentence. Put differently, on this account there is no guarantee that 'she' denotes Laura, but, even so, according to this account 'she' can always denote Laura.[42]

According to an answer like the one just sketched, the mechanisms by which 'she' denotes Laura in

Immediately after Emanuel realized that Laura was not at home, she arrived
When Baptiste woke up, Laura was not at home, but she arrived immediately after

are different, since in the latter 'Laura' clearly does not occur as mentioned. But sententialists may provide an explanation of why, even if the mechanism is different, it may look as if the mechanism is the same. Even if 'she' is taken to behave similarly in

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[41] We may, moreover, note that exactly as the pure mention of a name may render the bearer of the name salient, so the use of a word may render the word salient. For example, if a speaker utters
There are fewer rhinoceroses these days,
the interlocutor may comment
That is a difficult word to spell
thereby referring to one of the words uttered by the speaker (Predelli 2005: 107).

[42] I think that sententialists can allow that 'she' might remain *free to roam its surrounding in search of a target* (Predelli 2013: 156), so that it can always denote some other girl other than Laura in every use of
Immediately after Emanuel realized that Laura was not at home, she arrived,
and can explain the difference between this example and
She arrived
uttered in isolation while pointing to Laura in term of the distinction between the information provided by the linguistic and the extra-linguistic aspects of the contexts. Nonetheless, it should be noted that sententialists may go a step further. They can hold that 'she', as it occurs in the example, is a pure indexical, but an *obstinate* one (Predelli 2013: 159-160) in that even though 'she' is not anaphoric, in every *use* of the sentence 'Laura' puts constraints on who is the (most) salient girl, and thereby puts constraints on the denotation of 'she'. Given that every time it is used 'Laura' is understood even though quoted, it constrains 'she' to denote Laura, even though there is no semantic link between the two.

Immediately after Emanuel realized that Laura was not at home, she arrived
She arrived

uttered in isolation while pointing to Laura, an important difference is to be recognized: in the first sentence, as we have seen, it is what occurs explicitly in the sentence, and not some feature of the extra linguistic context, that makes the hearer understand what 'she' denotes. Thus there is a difference between

Immediately after Emanuel realized that Laura was not at home, she arrived,
When Baptiste woke up, Laura was not at home, but she arrived immediately after,

because in the first there is no semantic or syntactic link between 'Laura' and 'she'. But it is nonetheless still true, on the sententialist answer, that also in the first sentence 'she' usually depends for its denotation on 'Laura'.

I also think that this more engaging sententialist approach to Bach's mystery should count as an adequate sententialist answer. But it is surely just a sketchy answer. Much more needs to be said about what *context* exactly is, and what it means for something to be *salient*. But it should be noted that these notions are complex and problematic in themselves, and the sententialist cannot be blamed because she did not spell them out in detail. Furthermore, if she is so blamed, she may well switch back to the dismissive answer, and explain that she will solve Bach's problem when she is first provided with exact notions and a solution to all the other mysteries. As Bach (1997: 217) and Loar (1972: 49) remark, Fregeans also would have to face their counterpart of Bach's mystery: if in

Immediately after Emanuel realized that Laura was not at home, she arrived

'Laura' denotes a sense, then how can 'she' denote Laura, and not a sense? Thus Bach's anaphoric pronouns are a problem not just for sententialists, but also for some propositionalists. Moreover, a similar problem arises for any propositionalist that holds that only propositions are denoted in propositional attitude sentences. For how can we then account for something like

Baptiste said that Laura was not at home, in *so many words*

if words have not been previously denoted? Sententialists may then conclude that, however these and other mysterious examples are to be explained,

Immediately after Emanuel realized that Laura was not at home, she arrived

is to be explained similarly.[43]

3.4.2 INDEXICALS AND THE INTENDED DENOTATION

According to the sententialist account developed in the previous chapter, in propositional attitude sentences a sentence is denoted and something like

Olga believes that Cicero is smart

is true if Olga believes something that we can represent with the sentence "Cicero is smart". As we have seen, what a sentence can represent depends on what we are interested in representing, and therefore a sentence that is an apt tool for representation in one context may be an inadequate tool in another. Indexicals show very clearly another way in which aptness of representation depends on context. Take for example

Olga believes that he is nice.

According to the sententialist account we are suggesting, when I utter that Olga believes that he is nice, I am denoting a sentence in order to represent what Olga believes. Since a pronoun occurs in "He is nice", the sentence in isolation expresses that the most salient man in the context is nice. Even though the sentence is denoted according to sententialism, and not used, it is still the case that what it expresses in isolation is conveyed, and this conveyed content clearly plays a role in establishing whether a sentence is an apt tool of representation. In the previous chapter, while discussing Frege's and Kripke's puzzles, we saw that what a sentence expresses is not all that matters when it comes to what the sentence can represent. But this does not mean that what the sentence would express in isolation does not matter at all. Thus a change of context, and therefore change of the salient man, implies a change in the representational aptness of

He is nice.

[43] For those who take quoted sentences as only mentioned, other mysteries are some old examples by Partee 1973: 412, such as

Immediately after Emanuel shouted "Laura is not at home", she arrived.

Some might take these examples as able to show that quoted sentences are both mentioned and used. But, as I show in the main text, given the various mysteries of anaphoric denotation, and given that other explanations are available, it seems better not to take anaphora as a reliable guide to what and how many things are denoted by the antecedents of some pronouns.

All this seems straightforward, but in the literature it is possible to find objections to sententialism based exactly on indexicals. Here, for example, is a passage by Schiffer (2003: 302-309):

> An account of truth for utterances that doesn't see indexical reference as dependent on speaker's reference can't possibly provide an adequate basis for exploiting the speaker as a source of information about the states of affairs constituting the truth conditions of his utterances. But the sententialist can't appeal to referring, since that relation essentially involves propositional attitudes, most notably intending.

Schiffer holds that sententialists cannot rely on intentions. Then, he urges, according to sententialists a sentence like

> Olga believes that he is nice

cannot be taken to provide us with the information that Olga believes something about, let us say, Baptiste. For the conveyed information that 'he' stands for Baptiste depends on the relevant intentions that 'he' be so taken. For sententialists, then, the attribution does not provide us with such information about Olga's belief being about Baptiste, and therefore they lose some *information about the states of affairs constituting the truth conditions of his utterances*. Thus, Schiffer concludes, since it loses some information that we take propositional attitude sentences to provide us with, sententialism cannot be correct.

I think that this objection might constitute a serious issue for a sententialist logic that is put forward with the aim of getting rid of the mind and of the intentions of the subjects. But, as we have seen, sententialism as an account of natural language is not necessarily combined with such a goal, and in fact it is much better for it to not be so combined. Thus, as Higginbotham (2006: 113) observes, the objection "appears to burden sententialism with a program to which there is no commitment; namely, the program of doing away at a stroke with all that is non-sentential". As we have seen, we in fact did not commit to such a programme, and there is every reason not to do so, apart from indexicals. As we saw when discussing Kripke's puzzles, the account here suggested should not be seen as a reductive project, reducing intentions and the mind to *mere* bits of language, but should instead be seen as an account according to which words are *also* relevant in representing those minds and intentions.

This objection dismissed, something still needs to be discussed that has to do with sententialism and indexicals. As we have already seen in §2.1.1, sententialists have the resources to see a difference between

Olga said: "Cicero is smart"

Olga said that Cicero is smart.

For they can hold, as is intuitively correct, that the first is true iff Olga uttered the very sentence "Cicero is smart", which is then the direct object of saying, while for the second to be true it is not necessary that Olga uttered those very words, it being sufficient that she put into words something that can be *represented* by "Cicero is smart". As we will see now, by relying on the idea that a sentence denoted by a 'that'-clause should be taken to represent an attitude, sententialists can also explain the difference in the behaviour of indexicals in direct and indirect speech reports. Kaplan observes (1977: 510-511):

> There is a way to control an indexical, to keep it from taking primary scope, and even to refer it to another context (this amounts to changing its character). Use quotation marks. If we *mention* the indexical rather than *use* it, we can, of course, operate directly on it. Carnap once pointed out to me how important the difference between direct and indirect quotation is in
>
> Otto said "I am a fool"
> Otto said that I am a fool.

According to sententialism, indexicals occurring within 'that'-clauses are mentioned. Thus, in accordance with Kaplan, according to sententialism it would have to be possible for me to utter a propositional attitude sentence like

Otto said that I am a fool,

and not to denote myself. But in fact, even though according to sententialism 'I' does not denote either me or Otto, since it is merely quoted, still the attribution conveys that Otto said something about me, not about Otto. Why so? It seems that sententialists really need to come up with an explanation, because the worry here is that one might take the difference in the two sentences as able to show, in contrast with what sententialism claims, that in the second sentence indexicals (and so everything else) are used.

Now, Quine (1960: 218) held that

> in indirect quotation we project ourselves into what, from his remarks and other indications, we imagine the speaker's state of mind to have been, and then we say what, in our language, is natural and relevant for us in the state thus feigned ... Correspondingly for the other propositional attitudes, for all of them can be thought of as involving something like quotation of one's own

> imagined verbal response to an imagined situation. Casting our real selves thus in unreal roles, we do not generally know how much reality to hold constant. Quandaries arise.

If Quine is right, quandaries arise indeed. Why is it that if I utter

> Otto said that I am a fool

the attribution is systematically taken to convey something about my *real self* and not Otto, i.e. the subject we are dramatically taking the *unreal role* of? If I am an actor and I utter

> After the ghost of my father appears to me, I resolve to avenge his death,

you may well take my utterance to be such that I am denoting not myself, but the character I am playing (Nunberg 1993: 21). Similarly, if I am lecturing on the *Nicomachean Ethics* in an introductory class and I utter

> I argued at length that one lives the best life by exercising both moral and intellectual virtues. And now I am suddenly advocating a rather different position, namely that the good life must be devoted solely to theoretical activity. Do you see a way out of this apparent inconsistency?,

it seems hard to deny that you can take my utterance as a case of pretending to be Aristotle, and so take 'I' to denote not me, but Aristotle (Predelli 1998: 408). Again similarly, suppose that you insisted on fixing my car. You make a disaster and I comment

> Sure, *I* can do it! *I* can fix anything! And now, look what you've done!

You can take my utterance of "*I* can do it! *I* can fix anything!" as a case of pretending to be you, and then 'I' does not denote me, but you (Predelli 1998: 408).

Thus indexicals show that in uttering propositional attitude sentences we are not putting ourselves in somebody's shoes, because something like

> Otto said that I am a fool

always conveys that Otto said something about me, not Otto, and the shoes are then always mine. But in fact the sententialist account suggested here does not endorse Quine's take on the

issue, and it can provide a good explanation of why I am intended to be the conveyed denotation of 'I' in

Otto said that I am a fool.

There are some cases in which, even if I utter 'I' and use it, it does not seem to denote me (and similar considerations hold for 'here' and 'now' for that matter). First of all, we have the cases of the actor, Aristotle and the fake car fixer seen above. Secondly, there is

Condemned prisoner: I am traditionally allowed to order whatever I like for my last meal

in which 'I' cannot denote me because the sentence seems true, but I am not traditionally allowed anything (Nunberg 1993: 20). Similarly, we have

> So Jane wants a puppy and they buy her this nice terrier. Now, if I have a dog, I should take good care of it, right? Well, now that she's got one, Jane seems to be entirely uninterested in that poor thing.

The sentence

If I have a dog, I should take good care of it

does not seem to express something about what I should do, but seems to express that, typically, someone who has a dog ought to take good care of it (Predelli 2004: 17). Then we have a version of the so-called answering machine paradox that involves 'I': let us suppose that you use a tape of me reading a message on your answer-phone. Clearly, it does not seem that every time the answering machine goes on it is said that I am not in your house (Corazza, Fish, Gorvett 2002: 12-13). Furthermore we have the following post-it case: suppose you are not in your office one day, and I notice that a number of students keep approaching your door and knocking. I then decide to write

I am not here today

on a post-it and attach it on your door. As Corazza, Fish and Gorvett (2002: 5) note, it seems strange to deny that 'I' denotes you, not me. Finally, we also have an array of other cases, which are less obviously cases in which 'I', as used by me, does not denote me. For example, we have

I am parked out back

uttered to express that my car is parked out back,

President: The Founders invested me with sole responsibility for appointing Supreme Court justices

uttered to express that The Founders invested the president with sole responsibility for appointing Supreme Court justices, and the following verse from an old music-hall song about an elf,

I'm quite as big for me, he said, as you are big for you,

where 'me' seems to contribute not the utterer, i.e. the elf, but the property of being an elf (Nunberg 1993: 20-21).

At least some of these examples seem uncontroversially cases in which I utter 'I' and still the denotation is not me. Now, however these cases have to be explained, it is clear that these cases are, although important, surely deviations from the norm (Predelli 2003: 131). They are marginal and isolated cases (Recanati 2000: 174), and it goes without saying that in most of the cases the contextual agent is the writer or speaker (Corazza, Fish, Gorvett 2002, 14). Moreover, as well as being marginal, there is also a reason why in these examples we should depart from the norm. As Predelli (2004: 15) remarks, there is an undeniable supremacy of the parameters in the context of utterance in normal situations, so that strong motivations are required in order to raise to salience a context distinct from the context of utterance. In order to depart from the norm that 'I' as used by me denotes me, we need something that makes it worth it.

Let us then go back to

Otto said "I am a fool"
Otto said that I am a fool.

According to sententialism, a sentence is denoted in both; and thus in both 'I' denotes 'I', a linguistic item, and the character of 'I' is therefore constant. Thus from the sententialist point of view, no shift in the parameters with respect to which the sentence is to be evaluated needs to be posited. But still, at the level of what is conveyed, the first conveys that Otto said something about himself, while the second conveys something about me. Why so? In

Otto said: "I am a fool"

the sentence denoted is the direct object of his saying. When we use a direct speech report, we do indeed talk as surrogate-speakers, and we put ourselves into Otto's shoes and repeat what he said (Burge 1978b:146-147). We can even mimic the accent, the typical pose, the distinctive tone of voice. He uttered 'I', we repeat, and we utter 'I'. We have no liberty with direct speech reports – we can only repeat. If he uttered the words "I am a fool", he uttered something about himself, so 'I' is intended to convey Otto, not me. Here the shift at the level of what is conveyed is worth making: we want to repeat the exact words. But with

Otto said that I am a fool

we do not try to repeat Otto's words, we do not *pretend to be* Otto, but we try to *represent* his attitudes. We have some liberty here in choosing our representative sentence, and there is no reason, at the level of what is conveyed, why we should shift the parameters with regard to which the sentence is to be evaluated. Since we are not trying to mimic Otto, the point of view that counts can still be *ours*, ours the shoes we are wearing. Since in the typical cases 'I' in my mouth denotes me, and since, moreover, we have no reason to depart from the norm, i.e. we have the liberty of not departing from the norm, we can use a sentence in which 'I' occurs to convey that the attitude is about me, and this will be understood by the hearer. To put this differently, of course we can imagine a language in which we use sentences in which 'I' occurs in order to represent what Olga believes about herself, or you, or bananas, for example, but this is not the way English works. Why is it the case that we do not denote a sentence in which 'I' occurs for beliefs about Olga, you or bananas? Simply because there is no need. Surely, in something like

I think that I am usually allowed to order what I want for my last meal,

the second 'I' might not convey me, but this has nothing to do with 'to think', and this is not the general case. According to sententialism, the general case is a case in which there is no departure from the norm either at the level of denotation or of what is conveyed: if I utter 'I', that 'I' denotes 'I' and conveys, in perfect accordance with the norm, me.[44]

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[44] Another departure from the norm concerning not 'I' but temporals is reported by Schlenker 2003: 64:
John has told me repeatedly over the years that he was sick two days ago.
According to Schlenker, 'two days ago' can be evaluated with respect to the context of the reported speech act but can also be interpreted with respect to the actual speech act. Schlenker holds, contrary to sententialism, that what occurs in those contexts is used and concludes from this and other examples that what occurs in those context systematically deviates from the norm. The other examples come from other languages, and in particular there is an example of the first person pronoun coming from Amharic. As Schlenker 2003: 31; 68-69 remarks, if the situation to be reported is
John says: "I am a hero".
while in English we would use
John says that he is a hero

Thus, sententialists can well hold that 'I' is mentioned even when it occurs in a 'that'-clause, so that the denotation of 'I' is the same in

Otto said "I am a fool"
Otto said that I am a fool.

And sententialists can still explain why what we have conveyed by the two sentences is different, i.e. why the first conveys that Otto said something about himself, while the second conveys that he said something about me. Sententialists can make room for cases in the middle, between direct and indirect reports, such as typical cases of parody (Sperber & Wilson 1981: 111). For example, exactly as you can say ironically,

Sententialism is correct,

mocking my tone of voice and my Italian accent, likewise you can say, ironically, again maybe while using my tone of voice and my accent

We must conclude that sententialism is correct.

Nonetheless, from the sententialist point of view, there is a crucial difference between direct and indirect speech reports. For sententialists, the difference depends on why we denote a sentence – to mimic or to represent – and not, as Kaplan suggests in the passage quoted above, on whether the sentence is used or mentioned.

The fact that we have no liberty with direct speech reports – we can only mimic and repeat – but we have the liberty of choosing the sentence with propositional attitude sentences explains, from the point of view of sententialism, many other aspects of the difference between direct and indirect speech reports. For example, take formal addresses and the Italian report

Warpe ha detto che Lei è simpatico,

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in Amharic we would use something whose literal translation is
John says that I am a hero.
If, as Schlenker urges, the Amharic and the temporals in English are genuine cases of indirect speech reports and not cases of direct reports, then from the sententialist perspective they show that there are languages and cases also in English in which there is a systematic shift. But, crucially, the shift is not at the level of denotations – 'that'-clauses would still denote sentences – but at the level of what is conveyed. Thus sententialists can explain them quite easily, by holding that there is a departure from the norm, because there is a reason for it, whatever it is. Put differently, since nothing changes in the denotations, these cases are not particularly problematic for sententialists because, as Kaplan 1977: 510-511 remarks, "[i]f we *mention* the indexical rather than *use* it, we can, of course, operate directly on it."

in which the formal 'Lei' occurs. As Predelli (2013: 87-88) notes, the choice between the formal and the informal does not depend on the relationship between Warpe and my addressee, but on my relationship with the addressee, i.e. I should not be familiar with him. Why? According to sententialism, this is the case because I could choose the sentence and my choice tells about my relationship with the addressee. The use of swear words can be similarly explained. Suppose Sam utters

> Stan won't turn off his damn radio.

Suppose, moreover, that I make the following report:

> Sam says that Stan won't turn off his damn radio.

As Bach (2006: 493-494) notes, my report is taken as expressing my own feeling about Stan's radio. Sententialists can explain that this is the case because I could have chosen a sentence in which no swear word occurs, and having chosen one in which a swear word occurs indicates something about my feeling. Surely, sometimes we can use a swear word or a derogatory word and still the report will not be taken as expressing our feelings. These are a couple of examples discussed by Predelli (2013: 106-107):

> Racists believe that Italians are wops
> I am not prejudiced against Caucasians. But John, who is, thinks/claims that you are the worst honky he knows.

According to Predelli and Bach, these examples should be taken as involving some form of quotation. Sententialist clearly cannot hold that in

> I am not prejudiced against Caucasians. But John, who is, thinks/claims that you are the worst honky he knows,

but not in

> Sam says that Stan won't turn off his damn radio,

the 'that'-clause is quotational. But the sententialist can explain the difference between these cases in term of whose shoes we are wearing and hold that in cases like

I am not prejudiced against Caucasians. But John, who is, thinks/claims that you are the worst honky he knows

we are wearing John's shoes, for whatever reason. Thus the radio case is to be assimilated to indirect speech reports, while John's example is to be assimilated to direct ones.

Going back to indexicals, I think we can then conclude that sententialists can perfectly explain both the mystery behind Bach's pronouns and the difference between

Otto said "I am a fool"
Otto said that I am a fool,

so that indexicals do not seem to threaten sententialists' core thesis, i.e.

(S) 'That'-clauses denote sentences.

CONCLUSION

Let us go back to the last chapter's example of a representation of Olga's preferences concerning the shapes of fruits. Depending on what we are interested in, in order to represent her preferences, we can use numbers for the different shapes, we can use colours, we can use bits of chalk and we can use shapes. If we use numbers, for example, our representation does not tell us anything about what shapes she likes: the representation tells us that Olga likes 2 more than 3, so we know the structural relations between Olga's preferences, but we know nothing about the kind of shape Olga actually prefers. Similarly, if we use shapes and we assign shapes randomly to polygons, we know that Olga prefers the dodecahedron to the triangle, so we know her hierarchy of preferences; but we do not know anything about what she likes. The situation is different when we match the shapes, in some way or other, to what can count as the most similar polygons. In this case, the representation allows us to understand not only the structural relations between Olga's preferences, but also the kind of shapes Olga really prefers: we know that she likes things having a shape similar to a dodecahedron more than things having a shape similar to a triangle.

Now, according to sententialism's third tenet, i.e.

(S) 'That'-clauses denote sentences,

in propositional attitude sentences we denote a sentence. Moreover, as we have seen, according to the account we are here considering the sentence represents the attitude of the subject. We could have chosen sentences randomly, or on the basis of their length, or on the basis of how many vowels occur in them. But speakers understand the sentences they can understand, even though the sentences are merely mentioned, so the contents of the sentences are still there as a *free lunch* for the hearers, a lunch they usually cannot but devour. What, then, would be the point of choosing the sentence

Flamingos fly

in order to represent a belief about snow, when we can choose a sentence about snow? Thus from the sententialist point of view in natural languages, we maximise the information provided by our representation by relying also on the meanings of the sentences we denote, meanings that would anyway be understood. Since, as we have seen, those sentences are understood, the situation is more similar to when we represent shapes with similar shapes than to when we randomly assign bits of chalk to those shapes. Because the sentences are understood, in using "Flamingos fly" for a belief about snow we would, first of all, lose the chance to represent as much as possible. Secondly, we would unnecessarily and systematically mislead the hearer who would have flamingos conveyed to her, even though we are speaking about a belief of Olga about snow. While we can imagine a language in which we assign sentences to attitudes depending merely on their length, this is not the way English works. In English, in denoting "Snow is white" to represent a belief of Dave, given that the hearer will understand the sentence, we enable her to know something about what Dave's belief is really about, or, to use Schiffer's phrases, to know that Dave has a belief that is true if, and only if, snow is white and, secondly, to know that it is about snow and whiteness (1987: 133; 2008: 289).

Lying behind the objections seen in this chapter, most notably behind Church's translation argument and Schiffer's problem, there is the common assumption that sententialism makes contents disappear from propositional attitude sentences. But this assumption is false. Sententialism is an account of propositional attitude sentences in terms of language-dependent entities that *have* a content. But this does not mean that contents disappear or that they do not matter; rather, it is only that they are not denoted. In recognizing the impeccable observation that speakers of a language immediately understand sentences of that language, sententialists can answer all the objections that supposedly doom it. Whether or not it is to be considered as a

better account than propositionalism, I think we have to conclude that it is a viable alternative for accounting for sentences like

Olga believes that Cicero is smart.

Having rescued sententialism for propositional attitude sentences, in the next chapter we will move to the different battle field of *wh*-attributions, such as

Jim knows whether Rose likes flamingos.

4
SENTENTIALISM FOR 'WH'-CLAUSES

Some predicates of propositional attitude can be followed not just by 'that'-clauses, but also by clauses that begin with one of the following – *what*, *who*, *whom*, *which*, *whence*, *when*, *why*, *where*, *whither*, *how*, *whether* – as in

Jim knows *what Rose told you*
Laura asked *whom Rose invited*
George understood *whether Rose will leave*.

Some of these strings are obviously ambiguous. Take for example

Jim told me what Rose told you.

As Vendler (1972: 94) puts it, there are 'what's and 'what's. In one of its readings, the string is equivalent to

Jim told me *that which* Rose told you,

where the pronoun begins a relative clause. On this reading, the string is true, for example, if Jim told me that Joseph is nice and Rose told you that Joseph is nice. On a second reading, on the other hand, the clause is interrogative, and the sentence is true, for example, if Rose told you that Joseph is nice and Jim told me that Rose told you that Joseph is nice. There are predicates that allow both readings, such as 'to tell' and 'to know'. Even if it is much more natural to read 'to know' as followed by an interrogative in

I know what he told you,

nonetheless, the two readings are there, and in something like

I already knew what he just told you,

for example, the *that which* reading seems actually the most natural.[45] Other predicates allow only one of the two readings. The predicate 'to believe', for example, allows only the *that which* reading: the sentence

Jim believes what you said

can only mean that Jim believes *that which* you said. On the other hand, in contemporary English 'to wonder' allows only for the interrogative reading. The sentence

Jim wonders what Rose told you,

for example, only means that Jim wonders which are the things Rose told you, and something like

Jim wonders that which Rose told you

is in fact ungrammatical. There are some diagnostics that may help in understanding whether a clause is a genuine interrogative clause (Schaffer 2009: 488-489): according to a first diagnostic, only if the clause is genuinely interrogative can we add some particular idioms: 'who' may become 'who the hell', 'what' may become 'what on earth' and 'when' may become 'when in tarnation', etc. In fact,

Jim told me what on earth Rose told you

does not retain the *that which* meaning, and

Jim wonders what on earth Rose told you

is still perfectly fine. According to a second diagnostic, only if the clause is interrogative can we substitute multiple 'wh'-constructions, like 'what Rose told whom'. In fact,

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[45] Vendler 1972: 98; 1980: 278 holds that "twist as we might,

[I know what he said]

is not ambiguous" (1972: 98) and can only be read in the interrogative reading. Similarly, Vendler also holds that

I know what you believe

only has an interrogative reading. While I agree that this reading is much more natural, I do not see why the *that which* reading has to be considered as completely ruled out. This squares with the fact that the following,

I am not coming to your speech, since I already know everything you will say,

for example, is perfectly fine.

Jim told me what Rose told whom

does not have a *that which* reading.[46]

'Wh'-clauses that pass the two diagnostics above are the topic of this chapter. As we have seen, according to the so-called face-value theory of propositional attitude sentences, i.e.

(THE ALLEGEDLY FACE-VALUE THEORY)
(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;
(ST) 'That'-clauses are singular terms;
(P) 'That'-clauses denote propositions,

in something like

John believes that snow is white,

the 'that'-clause denotes the object of John's belief and that object is a proposition. In the previous chapters, I suggested that embracing sententialism, i.e. holding

(S) 'That'-clauses denote sentences

in place of (P), is a promising alternative way of completing theses (RP) and (ST). The purpose of this chapter is to see whether sententialism remains a viable alternative to the face-value theory when it comes to extending the two competing accounts to *wh*-attributions.

I will start by considering whether we are justified in treating 'that'- and 'wh'-clauses homogeneously. I will show that although there is no compelling reason, the extension is natural, very plausible and methodologically welcome. I will then show that in extending the face-value theory to 'wh'-clauses, those clauses denote answers, which are propositions. In

[46] Schaffer 2009: 489 detects also another diagnostic, based on the idea that only 'wh'-clauses can be changed into non-finite 'wh'-clauses: from
Jim understood what he needs to prove
we may move to
Jim understood what to prove.
Since the two diagnostics in the main text are sufficient to establish whether a clause is interrogative, I will not engage in a discussion of 'what to', which is, at least *prima facie*, a different construction.
We can note that the ambiguity between the interrogative and the *that which* readings is resolved in some languages. As Austin 1946: 168 remarks, in Latin for example the interrogative is rendered by 'quid', while the *that which* reading is rendered by 'quod'.

extending sententialism, on the other hand, 'wh'-clauses are best taken to denote indirect questions, which are linguistic items (§4.1).

We will then see, firstly, that there are some good reasons to think that some 'wh'-clauses denote questions and not propositions, and, secondly, that there are reasons to think that all 'wh'-clauses denote questions. Thus, we will conclude that when it comes to 'wh'-clauses sententialism seems not just a viable alternative to the face-value theory, but actually a better one (§4.2).

I will then discuss some classic problems concerning *wh*-attributions – the problem as to whether their truth-conditions are essentially contextual and the so-called *problem of convergent knowledge* – and I will show that while the problem of convergent knowledge constitutes a serious issue for propositionalists, from the sententialist point of view it can be easily and very naturally solved (§4.3).

I will conclude that even if we are not forced to treat 'wh'- and 'that'-clauses homogeneously, the treatment of 'wh'-clauses developed here gives us a reason to think that the version of sententialism for 'that'-clauses suggested in the previous chapters may indeed not just be a possible alternative on a par with propositionalism, but actually a better one.

4.1 EXTENDING THE ACCOUNTS TO *WH*-ATTRIBUTIONS

Concerning 'that'-clauses, both the face-value theory and sententialism share theses

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;
(ST) 'That'-clauses are singular terms.

Thus, for both accounts, treating 'that'- and 'wh'-clauses homogeneously means holding

(RP') Propositional attitude predicates occurring in *wh*-attributions designate relations;
(ST') 'Wh'-clauses are singular terms.

In order to see whether the extension is correct, we can start from these two theses that both accounts share. We will then see in §4.1.2 what, according to the two accounts, we should take 'wh'-clauses to denote.

4.1.1 UNIVOCITY OF THE PREDICATES AND 'WH'-CLAUSES AS SINGULAR TERMS

The easiest way to justify

(RP') Propositional attitude predicates occurring in *wh*-attributions designate relations

is to show that the predicates that can be followed by both 'that'- and 'wh'-clauses retain the same meaning in both cases. Since, as we saw in Chapter 1, we have good reasons for endorsing

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations,

if the predicates do not change meaning (RP') also is indirectly justified. Schaffer (2007: 396), in fact, follows exactly this route and holds that there are three considerations that support the thesis that the predicates retain the same meanings when followed by 'that'- and 'wh'-clauses. Let us consider each in turn.

According to Schaffer's first point, the predicates are not ambiguous because ambiguity is a *one-off lexical accident* while there are many predicates that can be followed by clauses of both kinds.[47] This consideration has some appeal to it: why would we have developed a language in which so many different predicates are ambiguous? But the consideration is far from conclusive. One may in fact deny that, in general, ambiguity is a one-off lexical accident and give a reason why we systematically use the same predicate. Take an at least not completely implausible theory according to which 'book' is ambiguous, having at least a token, a type, and a content meaning, as in, respectively,

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[47] Forgetting about clauses in their *that which* meaning and focusing on 'that'- and 'wh'-clauses, we have, firstly, predicates that cannot be combined with 'wh'-clauses, such as 'to assert', 'to assume', 'to hope', 'to insist', 'to think'. Secondly, there are predicates that can be followed only by 'wh'-clauses, such as 'to investigate' and 'to wonder'. Thirdly, we have predicates that can be combined with both kinds of constructions: 'to ask', 'to determine', 'to discover', 'to forget', 'to indicate', 'to inform', 'to know', 'to learn', 'to mention', 'to notice', 'to predict', 'to recall', 'to remember', 'to remind', 'to show', 'to specify', 'to tell'. The predicate 'to believe' can be followed by 'wh'-clauses in its negated idiomatic form, as in

I cannot believe who came to the party

I do not believe what I did.

On this, see Belnap 1990: 16; Boër 1978: 312-315; 322; Karttunen 1977: 5-6; Vendler 1980: 284-287. See Égré 2008: 86 and Vendler 1980: 287-288 for the fact that the division of predicates in this way is cross-linguistically well supported.

Take the book on the third shelf
Due to the censorship, the book was burnt in every house
The book inspired generations of English people.

The fact that 'dissertation', 'poem' and 'letter' behave similarly is obviously unable to show that 'book' cannot be ambiguous. One may well argue that the relation between the alleged different meanings is such that ambiguity is systematic. For example, one may hold that the type-token ambiguity is widespread across terms that denote objects subject to the type-token distinction exactly because a token is a token of a type and a type is a type of tokens, so that we use the same word for both the type and the token. Similarly, contra Schaffer, one may hold that a certain ambiguity is widespread across predicates having to do with psychological attitudes exactly because of the relations, whatever they are, between those attitudes.

As for the second of Schaffer's points, it is the classic *translation test* for ambiguity (see also Masto 2010: 402; Stanley 2011: 36-37). The datum is a strong and systematic one: 'to know' is translated in the same way when it is followed by either a 'that'- or a 'wh'-clause, and it is also translated in the same way in languages which distinguish between different predicates for the English 'to know'. Let us take Italian as an example. As we have already seen in §1.1.6, the two English sentences

Jim knows Rose
Jim knows that Rose will come

would be translated with different predicates:

Jim *conosce* Rose
Jim *sa* che Rose verrà.

But

Jim knows what time it is
Jim knows that he promised to cook dinner tonight

would be translated with the very same predicate 'sapere':

Jim *sa* che ore sono
Jim *sa* che ha promesso di cucinare la cena stasera.

The same happens with German and French. Thus Schaffer's datum is strong and cross-linguistically well supported. But, again, it seems unable to prove the univocity of 'to know' and other predicates once and for all. First of all, as we have already seen, we have again the general Quinean scepticism concerning the thesis that there is something like *the* translation of a sentence. Moreover, one may hold that for terms whose different meanings are connected in some way or other, it is because of these connections that the term is translated homogeneously, even if the term is ambiguous. Take for example 'book' again and the Italian 'libro'. Apart from some idiomatic expressions in which 'book' occurs that would be translated without employing 'libro' (nobody who cares about the Italian reader or listener would translate 'not in my book' as 'non nel mio libro', in which the idiomatic meaning gets completely lost), the two words are homogeneously translatable with each other. In particular, as it occurs in the English sentences

Take the book on the third shelf
Due to the censorship, the book was burnt in every house
The book inspired generations of English people,

'book' can always be translated into Italian as 'libro':

Prendi il *libro* sul terzo ripiano
A causa della censura, il *libro* fu bruciato in ogni casa
Il *libro* ha ispirato generazioni di inglesi.

But this does not prove that 'book' is not ambiguous. One may in fact hold that the translation is homogeneous because the relations between the different meanings are so strong that every language uses the same term for all of those meanings to preserve exactly the explicit links between them.

Finally, on to the third of Schaffer's points, which is the classic *zeugma test* (see also Boër 1978: 309-313; Groenendijk & Stokhof 1982: 185). The idea is that since in each of the following sentences,

John knows that Peter has left for Paris, and whether Mary has gone with him
I know what time it is, and that I promised to cook dinner,

a single occurrence of 'to know' occurs, then the predicate should have the same meaning when followed by a 'what'-, a 'whether'- or a 'that'-clause. As we have already seen in §1.1.6, this test does not seem completely reliable either. In particular, as we have seen, the acceptability of the conjunction seems to depend on the relations between the conjuncts. In the examples Schaffer

provides there is a clear relation between the conjuncts, and this may be the reason why the sentences are acceptable. In fact, a sentence like

I know what I ate yesterday and that 2 plus 2 is four

is a bit odd. On the other hand, I think we should recognize that

I know that I ate cheese yesterday and that 2 plus 2 is four

does not look completely fine either. In this sentence, the predicate arguably retains the same meaning because it is followed by clauses of the very same kind, but the sentence sounds fine only if we think about some special and unusual contexts, such as one in which I am asked to say randomly two things I know.

All of the usual considerations for the univocity of the predicates that may be followed by both 'that'- and 'wh'-clauses are thus disputable. Are the predicates ambiguous, then? They say that if it looks like a duck, swims like a duck, and quacks like a duck, then it is a duck. That is clearly false – it may well be a well-designed toy duck. But it may also be a duck, and its being a duck is the most natural explanation of why it looks like one, swims like one and quacks like one. Thus even if there are other explanations of the fact that many predicates may be followed by both 'that'- and 'wh'-clauses, of the fact that 'to know' is translated homogeneously, and of the fact that we can coordinate across a conjunction, the simplest and most intuitive explanation is that the predicates do have the same meanings when followed by clauses of the two kinds. Schaffer takes his considerations to show that the two kinds of clause *have* to be treated homogeneously, but I think that we should instead hold that the positive result is weaker, relying on this being the *simplest* explanation, not on this being *the* explanation. Still, we should also recognize a stronger negative result: exactly because the predicates pass the translation test and the coordination across conjunction test, we really have no good reasons to introduce an ambiguity.[48] In the absence of other independent reasons for taking the homogeneous account as incorrect, I think we had better assume the univocity of the predicates.

Thus, since the predicates retain the same meaning when followed by 'that'- or 'wh'-clauses and given that, as we concluded in Chapter 1, it is better to take propositional attitude predicates

[48] The thesis of the univocity of 'to know' when followed by a 'that'- and a 'wh'- clause should be distinguished from the thesis that 'to know' retains the same meaning also in something like
Jim knows how to dance.
Phrases like 'how to dance' can be taken to be (Stanley & Williamson 2001: 419-420; Stanley 2011: 70-97), but are not necessarily or immediately, 'wh'-clauses and therefore nothing immediately follows about them.

occurring in propositional attitude sentences as designating relations, then we can quite safely assume that it is better to endorse the following as well:

(RP') Propositional attitude predicates occurring in *wh*-attributions designate relations.

Having shown that we have good reasons to endorse (RP'), we can now move to the second step in extending the accounts of 'that'-clauses to 'wh'-clauses, which is tantamount to endorsing

(ST') 'Wh'-clauses are singular terms.

Surely, the thesis does not follow directly from the univocity of the predicates. Even if in sentences like

Jim knows what time it is
Jim knows that he promised to cook dinner tonight

the predicate should be taken to have the same meaning, this does not show that clauses of the two different kinds make a contribution of the same kind in the two sentences. Jumping to the conclusion that the contribution is the same because the predicate has the same meaning would be like jumping to the conclusion that 'to Rose' and 'quickly' make the same kind of contribution in the following sentences,

Emanuel wrote a letter to Rose
Emanuel wrote a letter quickly,

because 'to write' has the same meaning in both. Thus in order to support the extension of an account of 'that'-clauses to 'wh'-clauses, some further reasons are needed to take 'wh'-clauses as singular terms.

One might think that we can nonetheless rely on

(RP') Propositional attitude predicates occurring in *wh*-attributions designate relations

and hold that since the predicates have the same meaning when followed by a 'that'- or a 'wh'-clause, then the adicity of the predicate should be the same in the two constructions (Schaffer 2007: 396-397). If this consideration was correct, then since in

Jim knows that he promised to cook dinner tonight

'to know' is dyadic, so it should be in

Jim knows what time it is

and we could then conclude that 'wh'-clauses also contribute one *relatum*, and are therefore best taken to be singular terms. But I think that it is better not to rely on the thesis that if a predicate does not change meaning, then the adicity is the same. For this thesis may well be disputed and has been strongly disputed, for example by Oliver and Smiley (2004). They give various diverse reasons why we should allow that there are predicates that retain the same meaning, no matter the adicity. Here is just one rough example: from

Jim ate pizza

it follows

Somebody ate pizza.

Similarly, from

John and Rose ate pizza,

it follows

Somebody ate pizza.

The quantified

Somebody ate pizza

seems to express the same in both cases, and the predicate 'to eat' thus seems unambiguous. But if the predicate needs to have the same adicity in order for the existential claim to be unambiguous, then since, so to say, 'Jim' occupies only one place, 'Jim and Rose' should occupy just one place and should therefore somehow be a unity. But no intelligible unity that we can create out of Jim and Rose seems to work: the set of Jim and Rose did not eat pizza, and neither did the pair, the ordered pair, the class, the group, and what have you. I am inclined to think that there are predicates that retain the same meaning no matter what the adicity. But even if

this is *disturbing* and *implausible*, as Strawson (1979: 146) urged, so that it is better to hold that predicates change meanings when the adicity changes, this cannot be simply assumed but necessitates a discussion of the pizza and other cases. We would then need to defend

(ST') 'Wh'-clauses are singular terms

on the basis of a controversial thesis, and this is neither straightforward nor very appealing.

Luckily, this is in fact not needed. For it is clear that reasons similar to those that support

(ST) 'That'-clauses are singular terms

can be put forward regarding 'wh'-clauses as well. Let us see the points very briefly. First of all, it is easy to see that 'wh'-clauses are best taken to be syntactic units (Stanley & Williamson 2001: 417-418). Just to give an example, if in

Jim knows what (on earth) Rose said (to whom)

'what' is taken to be part of the predicate 'knows what', we do not have the same predicate 'to know' occurring in both

Jim knows what (on earth) Rose said (to whom)
Jim knows that Rose finds Dave nice,

and this goes against the data we saw above. For example, it would not be possible to obtain

Jim knows what (on earth) Rose said (to whom) and that Rose finds Dave nice,

while in fact it is fine (Lewis 1982/1998: 49). Secondly, exactly as with 'that'-clauses, 'wh'-clauses move into subject position in the passive form: from

Jim established what (on earth) they will tell (whom)

we can in fact move to

What (on earth) they will tell (whom) was established by Jim,

but not to

*They will tell (whom) was established what (on earth) by Jim,
*What (on earth) they was established will tell (whom) by Jim.

The passive form does not only show that 'wh'-clauses are syntactic units, but also suggests that they are either singular terms or quantified phrases: as we saw in §1.1.5, in the passive transformation, we change the role of some *relata*, so that the patient(s) becomes the agent(s) and vice versa. Since the 'wh'-clause moves into subject position, it seems that it denotes or characterizes the object that, in the transformation, becomes a subject. Furthermore, there is other data that also goes in the same direction. Given the following question,

Who did establish what (on earth) they will tell (whom)?,

these are perfectly acceptable answers:

Jim established *that*
Jim established *it*,

in which 'that' and 'it' seem indeed to stand for the object of Jim's decision. As we concluded in §1.2.2 for 'that'-clauses, it seems correct to discard the thesis that clauses are quantified phrases not reducible to singular terms, if possible.[49] It seems possible: we have no reason why we should not take 'wh'-clauses to be singular terms, and so I think that we can safely assume that

(ST') 'Wh'-clauses are singular terms

is also true.

4.1.2 WHAT DO 'WH'-CLAUSES DENOTE?

Since, in accordance with

(ST') 'Wh'-clauses are singular terms,

'wh'-clauses are best taken to be singular terms, we now need to establish what they denote. As we will see, this is where, unsurprisingly, sententialism and the face-value theory differ when it comes to *wh*-attributions.

[49] Moreover, as Dummett 1981: 71-72 shows, 'wh'-clauses do pass the inferential tests for singular terms seen in §1.2.2.

Sententialism, as developed in the previous chapters, quite clearly and naturally extends to 'wh'-clauses in the following way:

(SENTENTIALISM FOR *WH*-ATTRIBUTIONS)
(RP') Propositional attitude predicates occurring in *wh*-attributions designate relations;
(ST') 'Wh'-clauses are singular terms;
(Q) 'Wh'-clauses denote indirect questions, intended as linguistic items.[50]

According to the account, as it occurs in something like

Jim knows whether Rose likes flamingos,

'whether Rose likes flamingos' denotes a linguistic item, an indirect question. Just as 'that'-clauses represent attitudes, so indirect questions are best taken to represent attitudes, and in the example above the indirect question 'whether Rose likes flamingos' represents something Jim knows.[51]

What can propositionalists say about *wh*-attributions? With some exceptions, which, as we saw in §2.1.2, include Frege (1892/1984: 167-168), who held that 'wh'-clauses do not denote propositions, the face-value theory of propositional attitude sentences has generally been extended to *wh*-attributions by holding that 'wh'-clauses denote propositions too (Böer & Lycan 1986; Hamblin 1958; Hintikka 1975; Stanley & Williamson 2001; Braun 2011: 246-249). The reason is clear. Take

Jim knows that Rose likes flamingos
Jim knows whether Rose likes flamingos.

There are some important differences between these two sentences. In particular, imagine that you decided to take Rose to the zoo to have a look to the flamingos. You ask me whether it was a good idea. If I do not know whether Rose likes flamingos, but I think that Jim knows, I might use

Jim knows whether Rose likes flamingos

[50] While it is generally agreed upon that 'wh'-clauses are indirect questions, Brogaard 2009: 458-463 suggests that they are pseudo-clefts. For an array of evidence against Brogaard's account, see Schaffer 2009: 486-491.
[51] For the orthogonal problem of what a piece of knowledge is, see footnote 21.

to send you over to Jim to gain the piece of information you need. But if I do not know whether Rose likes flamingos, I cannot use

Jim knows that Rose likes flamingos,

because for me to be in the position to utter this sentence, I would have to think that Rose does like flamingos. Moreover, there might be reasons why, even though I know that Rose likes flamingos, I might prefer not to reveal this piece of information, and then in those cases I would use the *wh*-attribution. Suppose I know that Rose adores flamingos, but I promised Rose not to tell anybody. I cannot use

Jim knows that Rose likes flamingos,

because my utterance would be revelatory of what I know. Still, if I want you to know that she will love the day out, I can use

Jim knows whether Rose likes flamingos,

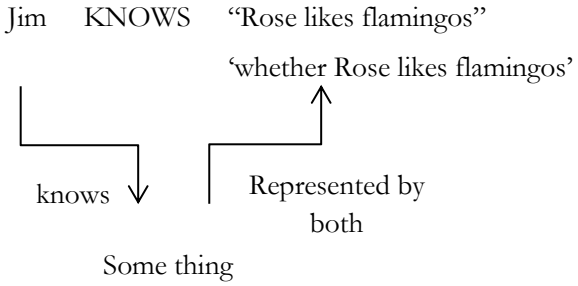
which does not reveal what I know and so allows me to keep my promise while helping you nonetheless. Thus there are some differences in when we are in a position to utter either

Jim knows that Rose likes flamingos

or

Jim knows whether Rose likes flamingos,

and moreover differences in which one we would choose, given our purposes. But this does not change the fact that they both concern the very same piece of knowledge of Jim's. Suppose that the propositional attitude sentence is true. Intuitively, the *wh*-attribution is true as well. According to the sententialist account, we can easily hold that in fact we are ascribing the very same attitude. For according to the account, the first sentence is true iff there is something Jim knows that can be represented by "Rose likes flamingos", while the second is true iff Jim knows something that can be represented by 'whether Rose likes flamingos'. The fact that that piece of knowledge can be represented with a 'that'-clause does not prevent the possibility that also an indirect question can represent the very same piece of knowledge:



Thus according to the sententialist account, the intuitive identity in truth-value between the propositional attitude sentence and the *wh*-attribution is easily explained as an identity in representational power of the two clauses. But the face-value theory should explain the identity in truth-value of the two ascriptions differently. For according to the face-value theory, the clause provides us with the object Jim knows, not with something that represents that object. If the 'that'-clause and the 'whether'-clause provide us with different objects, it follows that if the two sentences are true, there are two pieces of knowledge Jim has, and this seems highly counterintuitive. Thus in order to preserve the intuition that in the two ascriptions we are simply phrasing differently the same attitude of Jim's, it seems better, from the point of view of the face-value theorist, to take the 'whether'-clause as also denoting what the 'that'-cause denotes. Since the 'that'-clause denotes a proposition, the 'whether'-clause denotes a proposition too. Thus, it has been generally thought within the propositionalist account that since

Jim knows whether Rose likes flamingos

is true iff Jim knows that *p*, where *p* is a correct answer to the question "Does Rose like flamingos?", and since moreover answers are propositions, then 'whether Rose likes flamingos' denotes the proposition that counts as a correct answer to that question. The *correct* bit does not concern only 'to know'. For those predicates that can be followed by both 'that'- and 'wh'-clauses, and that are not factive when followed by a 'that'-clause, become factive when followed by 'wh'- clauses (Boër 1978: 313-314; 333; Hintikka 1975: 21-22; Kartunnen 1977: 11; Stanley 2011: 42).[52] Take 'to tell'. If we know that Jim told Baptiste that Rose came, we cannot conclude that Rose came. But if we know that Jim told Baptiste who came, then we can conclude that Baptiste was told the truth about who came. Thus, in general, 'wh'-clauses stand for a truth and therefore, in general, propositionalists hold that the proposition denoted by a 'wh'-clause is a

[52] As always, there seem to be some counter-examples. In the following sentence,

Every day the meteorologists tell the population whether it will rain, but they are often wrong,

for example, 'to tell' does not seem to be factive, and it is still followed by a 'wh'-clause (Égré 2008: 110). Other similar examples can be given. Still, as has been shown by Tsohatzidis 1993; 1997 and Holton 1997, these cases are pretty rare and should be taken as deviations from the norm, as when 'to know' sometimes is not factivity when combined with a clause about the future: take

I know I will miss the train, I can only hope it is late.

If 'to know' were use as factive in this example, there would be no point in hoping that the train is late.

proposition that counts not just as an answer to the corresponding question, but as a correct one.

The best way to extend the face-value theory to *wh*-attributions is therefore the following:

(THE ALLEGED FACE-VALUE THEORY FOR *WH*-ATTRIBUTIONS)
(RP') Propositional attitude predicates occurring in *wh*-attributions designate relations;
(ST') 'Wh'-clauses are singular terms;
(P') 'Wh'-clauses denote propositions.

Thus, as in the case of propositional attitude sentences, sententialism's and the face-value theory's extensions to 'wh'-clauses diverge on what the clauses denote. For sententialists, they denote linguistic items, and thus objects that *have* meaning. For the face-value theorists, by contrast, they denote propositions, and thus objects that *are* meanings.

4.2 PROPOSITIONS OR QUESTIONS

Does it make much of a difference if we take 'wh'-causes to denote propositions that count as correct answers, in accordance with the natural extension of the face-value theory to 'wh'-clauses, or to denote questions as linguistic items, in accordance with the natural extension of sententialism to those clauses? The first consideration that comes to mind in the direction of answering this question is that it is intuitively very difficult to take indirect questions to denote their answers: an indirect question is neither true nor false, so that it seems hard to take it to denote a proposition, which is instead something that is either true or false. Moreover, as Lewis (1982/1998: 49) notes, it also seems that 'wh'-clauses cannot denote propositions because a term denoting things of those kinds ought to make sense in various positions where a 'wh'-clause cannot in fact occur. Here is one of Lewis's examples:

*Whether Mustard did it or Scarlet did it is some sort of abstract entity.

But on the other hand it should be recognized that an account in terms of questions also has its *prima facie* counterexamples. For example, when Jim discovered what (on earth) Rose said (to whom) it does not seem that he discovered a question. Similarly for 'to know'. The following,

Jim knows what (on earth) Rose said (to whom)
Jim knows the question as to what (on earth) Rose said (to whom),

clearly have different truth-conditions (Ginzburg & Sag 2000: 67; Roselfedt 2008: 317). This is the problem we saw in §1.1.6 for 'that'-clauses: Jim can be acquainted with the question, without knowing what (on earth) Rose said (to whom). But these *prima facie* immediate counterexamples can be explained away, exactly in the same way in which we explained them away in the case of 'that'-clauses. One may in fact hold that the predicate 'to know' is ambiguous and has different meanings when followed by a clause, be it a 'wh'- or a 'that'-clause, or a definite description, such as something of the form 'the question as to …' (Stanley 2011: 64-65). Still neither the thesis that 'wh'-clauses denote propositions nor the thesis that they denote questions is obviously and intuitively correct. Thus, one might really wonder whether taking one route or the other makes any difference at all. But, as we will now see, on further reflection, we should recognize that it does indeed make a difference whether we go sententialist or propositionalist, and the difference is in fact in favour of sententialism.

A first consideration in this direction is that at least for some *wh*-attributions, it seems that we really cannot see how the object of the attitude could be a proposition. Let us take the following sentence:

Jim wonders why kettles emit a humming noise just before the water begins to boil.

If the sentence expresses a relation to a proposition that counts as a correct answer to the embedded question, then if the sentence is true Jim has an attitude toward an answer which can be expressed as wondering. This account can explain some cases, as when Jim realizes that he already knew what he was wondering about, without realizing it; but there seem to be cases in which the attitude cannot be accounted for in terms of an attitude toward an answer. As Bromberger (1992: 26-28; see also Friedman 2013: 162-163) remarks, these are the cases:

> Let us describe someone as in a p-predicament (p can be thought of as standing for 'puzzled' or 'perplexed' but for mnemonic purposes only) with regard to some question Q, if and only if on that person's views, the question Q admits of a right answer, yet the person can think of no answer, can make up no answer, can generate from his mental repertoire no answer to which given that person's views, there are no decisive objections … I can think of nothing, I can imagine nothing, I can conjure up nothing, I can invent nothing, I can remember nothing that can survive confrontation with what I take to be conditions on the right answer.

In the cases described by Bromberger, we are sure about all the answers we can think of, we are actually correct about them, and we still wonder. Thus there seem to be some cases in which the relation expressed by a *wh*-attribution is not a relation toward a proposition that counts as a correct answer. One might be tempted to hold that in fact also these are cases in which we are related to an answer, and it might seem that we are not, simply because we cannot realize it. But now take the following question

When did Mary stop beating her partner?,

and let us assume that Mary never started beating her partner, so that the question, by having a false presupposition, simply does not have a correct answer. Similarly, there is no largest number, and so there is no correct answer to the question

What is the largest number?

Sentences

Jim wonders what the greatest number is
Jim wonders when Mary stopped beating her partner

can be true. But what are the propositions denoted in the attributions, which count as correct answers to the questions above, and which Jim is related to? There simply is no proposition that could work, because the questions do not have correct answers. Therefore there are puzzlement cases in which we wonder even if there is no correct answer and so *a fortiori* no correct answer that we are related to. In fact it does often happens in philosophy that we stop wondering exactly when we finally understand that there was actually no answer because the question was somehow misplaced.

The most natural extension of the face-value theory for *wh*-attributions thus has a problem to solve. The best way to solve it, presumably, is to hold that even though in

Jim knows whether Rose likes flamingos

the clause denotes a proposition, so as to account for the fact that if Rose likes flamingos we are ascribing the very same attitude in

Jim knows that Rose likes flamingos
Jim knows whether Rose likes flamingos,

in other contexts 'wh'-clauses can denote questions, and not their answers. Put differently, the best way for propositionalists to solve the problem created by puzzlement attribution is to hold that *wh*-attributions are ambiguous, sometimes denoting questions, sometimes denoting answers, i.e. propositions (Higginbotham 1996: 379; Ginzburg & Sag 2000: 67-71; Groenendijk & Stokhof 1982: 177-178).

But this, as we will now see, does not seem enough. As we have seen, given that for something like

Jim knows whether Rose likes flamingos,

the face-value theory should take the clause to denote a proposition, it follows, presumably, that the face-value theory should take 'wh'-clauses to always denote propositions in the context of 'to know'. But now take the following attributions,

Jim does not know what is the greatest number
Jim does not know when Mary stopped beating her partner.

Since Mary never started beating her partner, and since there is no largest number, Jim cannot know when Mary stopped beating her partner and what the greatest number is; but what are the propositions denoted in the attributions, which count as correct answers to the corresponding questions, and which Jim in fact does not know? Again, there simply is no proposition that could work because the questions do not have a correct answer. If a clause cannot denote a proposition when the question does not have a correct answer, then what does it denote? Holding, from within a propositionalist account, that when (and only when) the question does not have a correct answer the clause denotes the question itself seems highly counterintuitive. For the two clauses occurring in

Jim knows when Mary stopped beating her partner
Jim knows whether Rose likes flamingos

seem to work exactly in the same way, i.e. either they both denote questions, or they both denote answers. But since it is possible that there is no correct answer, as in the first case, it seems they both denote a question. Since also in the context of 'to know' 'wh'-clauses end up denoting questions, we are left with no context in which they denote answers, exactly as the sententialist naturally holds.

The possible absence of a correct answer also shows that mixed accounts, according to which 'wh'-clauses denote both a question and an answer, as in the account suggested by Schaffer (2007: 394-395), seem similarly incorrect. Schaffer takes sentences like

> Jim knows what (on earth) Rose said (to whom),
> There is an answer Jim knows to the question "What (on earth) did Rose say (to whom)?"
> There is a question Jim knows the answer to,

to be able to show that in the first sentence a question and an answer are denoted. But, first of all, a sententialist may well say, together with Brogaard (2009: 464) and Masto (2010: 398), that there being a question and an answer corresponding to a 'wh'-clause does not imply that there is literally a question and an answer denoted in each *wh*-attribution. Moreover, since there are questions that have no correct answer, it is simply not the case that we always have an answer to denote.

Thus while puzzlement attributions show that answers cannot always do, I think that the fact that questions can have no correct answer show that answers can never do. In considering *wh*-attributions, therefore, we find a reason to think that sententialism is not just a viable alternative to the face-value theory, but actually a better one. As we will see in the next section, questions with no correct answers are not, in fact, the only reasons to think that sententialism might be the correct account.

4.3 QUESTIONS AS TOOLS OF REPRESENTATION

According to sententialism extended to 'wh'-clauses, in something like

> Jim knows whether Rose likes flamingos

we denote a question in order to represent what Jim knows. But when is it that a question can represent an attitude? We will start from this question (§4.3.1). We will then move to the so-called *problem of convergent knowledge*. As we will see, while at least in one of its versions the problem is a serious issue for propositionalists, sententialists can solve it perfectly and easily

(§§4.3.2-4.3.3). This will give us further reasons to think that, all in all, sententialism really deserves to be considered a viable account of language about our mental lives.

4.3.1 CONTEXTUALISM

When is it that a question can represent an attitude? In accordance with the spirit of the face-value theory, but not with its letter, since the answer is not denoted in the attribution, the most intuitive idea that comes to mind is that a certain question represents something Jim knows if he knows something that can count as a *correct* answer to that question. The account is then in accordance with Lewis (1982/1998: 48) when he claims that "those questioned are supposed to tell the truth without any special requests". A second thing to notice is that we tend to denote a question to represent an attitude when the attitude can count as an *informative*, non-trivial answer to the question. If Jim merely knows that those people that Rose invited were invited, it does not seem that we would use "whom Rose invited" to represent what Jim knows. As Hintikka (1975: 4) puts it, uninformative trivial answers would simply spoil the game in most cases. Moreover, for some questions there are both complete and incomplete answers. In different contexts, we tend to focus on either one or the other kind of answer. For let us suppose that Rose invited George, Gabriel and Dave. If Jim only knows that Rose invited George, it does not seem that we would use "whom Rose invited" in order to represent what Jim knows. Similarly, imagine that Rose gave a long articulated speech in which she actually tried to prove that arithmetic is complete after all. Imagine, moreover, that her talk started with "Gödel told us that arithmetic is incomplete". We would hardly say that Jim knows what Rose said if he just listened for a couple of minutes and only knows that Rose said that Gödel told us that arithmetic is incomplete. On the other hand, sometimes, the *mention one* answer is enough: if we want to buy an Italian newspaper in London and Jim only knows that an Italian newspaper can be bought on the Strand, we would probably say that Jim knows where to buy an Italian newspaper, even if he does not have the complete map of Italian newspapers sellers. On the other hand, if for some reason we want to buy all copies of the Italian newspapers sold today in London, what Jim knows is clearly not sufficient for us to be willing to say that he knows where to buy an Italian newspaper. Other variations concern what the answer is about. Suppose we are now in Paris and we ask Jim where to buy an Italian newspaper. Suppose moreover that Jim tells us again that the only thing he knows about Italian newspapers is that they can be bought on the Strand. In this context, we would hardly say that Jim knows where to buy an Italian newspaper.

Thus what counts as an answer to a question depends on many different aspects of the context in which the question is asked (Hookway 2008). For example, it seems that for something like

Jim knows who Rose is

to be true in some contexts we require Jim to be able to visually individuate Rose, while in other contexts we require Jim to know what Rose does for living, etc. Since we need to rule out the possibility of knowing who Rose is by simply knowing, for example, the logical truth that Rose is the denotation of 'Rose', some have held that knowledge-*wh* cannot be reduce to knowledge of a proposition (Kaplan 1977: 556, f. 72). According to many (Boër 1978: 331-332; Boër & Lycan 1986; Ginzburg & Sag 2001: 103-104; Schaffer 2007: 398; Stanley 2011: 69; 100-110), we should somewhere and somehow introduce into our analysis mode of presentations or silent parameters.[53] In these ways, our

Jim knows who Rose is

has different truth-values in different contexts because the piece of knowledge attributed is always relative to a way of thinking about Rose – as when we say that Jim knows who Rose is *when it comes to her appearance* – or a standard of knowledge – as when we say that Jim knows what water is *by scientific standards*.

Sententialists take things differently. As we have seen, the notion of representation is essentially a contextual notion, in which a role is played by what we are interested in, the other attitudes we are concerned about, etc. Thus, if we go sententialist, the fact that in different contexts the same kind of question can or cannot represent an attitude is simply due to the fact that the question represents something, and the representational aptness of a question, as well as the representational aptness of a sentence denoted by a 'that'-clause, depends on context. Put differently, sententialism is essentially a *contextualist* account. But the contextual variations are not to be seen as due to a hidden indexical, or a silent parameter. On this account, reasons why we should introduce parameters or ways of thinking seem to be missing. According to sententialism there is nothing like an attribution is isolation, but each attribution is to be seen as part of a representation; and different representations naturally mean different attributions, because the representational tools and their representational power are different. Thus even without parameters and indexicals the attributions are already context-dependent. Moreover, even though sententialism is essentially a contextualist account, this does not mean that according to sententialism in different contexts subjects have different attitudes. As Braun (2006; 2011: 251) puts it, the issue as to whether we should go contextualist or *invariantist* is the issue as to whether knowledge ascriptions vary in truth-value from context to context. Since the debate is usually considered from within accounts that take what follows the predicate as

[53] On the fact that the linguistic data are *compatible* with a silent parameter (but do not show that there is such a parameter), see Ludlow 2005: 27-35.

denoting the object of the attitudes, the question is often phrased in terms of whether we know different things in different contexts – for example, because the standards for knowledge are different, or because what we know depends on what else we know, or because knowledge is always knowledge among alternatives. But from the point of view of sententialism, the question is primarily whether in different contexts we can *represent* the very same pieces of knowledge in the same way, i.e. with the same clauses. Since, as we already know from Kripke's puzzles, nothing in general guarantees that the same representation is a good representation in two different contexts, sententialism, in this sense, cannot be a version of invariantism.

4.3.2 THE PROBLEM OF CONVERGENT KNOWLEDGE – *A OR B*

So far, or at least it seems, so good. But any account, like the one I am suggesting, according to which knowledge attributions have somehow to do with answers, needs to face the so-called *problem of convergent knowledge*.

I will start with Schaffer's way of putting it, and I will show that although both propositionalists and sententialists can solve the problem, the sententialist solution seems preferable. I will then move to Stout's formulations of the problem in the next section, and I will show that one of Stout's versions of the problem is indeed problematic from the face-value point of view. Since sententialists can easily solve this version of Stout's formulations, we will have found another reason to prefer a sententialist account.

Schaffer's version of the problem goes as follows (2007: 386-389):

(THE PROBLEM OF CONVERGENT KNOWLEDGE – *A OR B*)

(SC1)
Suppose that Bush is speaking on television. Then the questions
  Is Bush or Janet Jackson on television?
  Is Bush or Will Ferrell on television ?
are convergent—they have the same correct answer, namely
  Bush is on television;

(SC2)
So the following knowledge claims
  I know whether Bush or Janet Jackson is on television

I know whether Bush or Will Ferrell is on television

turn out to be equivalent, since both are true iff the following is true:

I know that Bush is on television;

(DATUM)

Yet this seems false. The two attributions are clearly inequivalent. Knowing whether Bush or Janet Jackson is on television is a relatively easy task. Virtually anyone (with decent vision and minimal cultural background) can know whether it is Bush or Janet Jackson. In contrast, knowing whether Bush or Will Ferrell is on television is a relatively hard task. If the impersonation is good enough, the question of whether it is Bush or Will Ferrell may be a rather hard question. So one may well know whether Bush or Janet Jackson is on television, but fail to know whether Bush or Will Ferrell is on television;

(CONCLUSION)

Knowledge cannot be knowledge of an answer.

What can sententialism say about this case? According to the sententialist account we are suggesting here, in

I know whether Bush or Janet Jackson is on television

I know whether Bush or Will Ferrell is on television

two different 'whether'-clauses are denoted, and the question then becomes whether they represent the same piece of knowledge. As Schaffer shows with this case, it seems they cannot, because the two attributions seem to have different truth-conditions. Why are things so, considering that, as we have seen, knowing a question is knowing something that counts as a correct answer, and the two questions seem to have the very same answer? Quite clearly, the solution is to hold that in fact the two do not have the same answer, and this is in fact the solution that propositionalists also have provided (Aloni & Égré 2010: 7-8, Kallestrup 2009: 471-472; Stanley 2011: 62-64). What needs to be established is what the different answers to the two questions are. A first way to solve the issue is to hold that we denote questions to represent pieces of knowledge only if the pieces of knowledge can count as *complete answers* to those questions. The two questions Schaffer employs,

Is Bush or Janet Jackson on television?

Is Bush or Will Ferrell on television?,

can be both *incompletely* answered by

Bush is on television,

but when it comes to attributions, we represent a piece of knowledge with a question only if it can count as a *complete answer*. Since the questions clearly have different complete answers, i.e., respectively,

Bush is on television and Janet Jackson is not on television
Bush is on television and Will Ferrell is not on television,

then

I know whether Bush or Janet Jackson is on television
I know whether Bush or Will Ferrell is on television

are not equivalent, exactly as Schaffer urges in his conclusion.

Another way to solve the issue is to go in the opposite direction, by holding, in company with Lewis (1982/1998: 52-54), that we can represent a piece of knowledge with a question when that piece of knowledge counts as either a direct or an indirect answer to the question. The questions

Is Bush or Janet Jackson on television?
Is Bush or Will Ferrell on television?

each have two answers: the answers to the first are

Bush is on television
Janet Jackson is not on television,

while the answers to the second are

Bush is on television
Will Ferrell is not on television.

The attribution

I know whether Bush or Janet Jackson is on television

is true iff either I have a piece of knowledge that is representable as

Bush is on television

or a piece of knowledge that is representable with

Janet Jackson is not on television.

The attribution

I know whether Bush or Will Ferrell is on television,

instead, is true iff either I have a piece of knowledge that is representable as

Bush is on television

or a piece of knowledge that is representable with

Will Ferrell is not on television.

If I knew that Bush is on television, so that I knew something representable with

Bush is on television,

then both

I know whether Bush or Janet Jackson is on television
I know whether Bush or Will Ferrell is on television

would be true. But in the case envisaged by Schaffer, I do not know that Bush is on television, exactly because I am unable to distinguish him from Will Ferrell. Still, the first attribution is true because I know that Janet Jackson is *not* on television, so that we can represent what I know also with 'whether Bush or Janet Jackson is on television'. But the second attribution is still false, because I know neither something that we can represent as

Bush is on television,

nor something that we can represent as

Will Ferrell is not on television.

Both strategies are genuine solutions to the problem, in that according to both

I know whether Bush or Janet Jackson is on television
I know whether Bush or Will Ferrell is on television

do not have the same truth-conditions, but we should note that neither seems to represent our practise of attributing *wh*-attributions in general. Sometimes it seems that we attribute knowledge in accordance with the first solution. As Boër (1978:310) puts it:

> Suppose Bob likes coffee and hates tea, but that John knows only that Bob likes coffee (i.e., John has no opinion regarding Bob's attitude towards tea; perhaps John does not even know what tea is!). … there is a lingering intuition that
> [John knows whether Bob likes coffee or tea]
> is not clearly true unless John also knows that Bob does NOT like tea.

Think moreover about other predicates. Imagine that we know that there is only one thing Bob likes, but we cannot remember what that is. We ask John:

US: What does Bob like?
John: Bob likes coffee
US: Amazing, so no tea even though he is English
John: You know, I cannot tell you anything about tea
US: You liar, you just told us whether Bob likes coffee or tea.

This would be quite a bizarre conversation. But there are also cases in which it seems that we would denote a question to represent an attitude even if the subject does not know something that counts as a complete answer. Imagine for example the following scenario. We are really looking forward to the broadcast on television of Janet Jackson's last concert, but we really do not like politics, so that we want to be sure that we see the entire concert, but no politics. We know that the concert will start just after Bush's talk and we run into the living room and ask our friend:

Is it Bush or Janet Jackson on television?

Our friend does not even know who Bush is, but answers that Janet Jackson is surely not on television. In this case we would happily say that she told us what we were asking, i.e. whether Bush or Janet Jackson is on television, and that she knows that.

Thus there are cases in which a question represents only what can count as a complete answer, and cases in which indirect answers would do. After discussing Schaffer's problem, Aloni and Égré (2010: 14-17) conclude that 'to know whether' is ambiguous between knowing either a direct or an indirect answer to the question, as opposed to knowing the complete answer. But while it does explain Schaffer's case, this thesis seems rather *ad hoc*, and in fact 'to know whether' does not pass any of our tests for ambiguity. But from the point of view of the account we are presenting here, the contextual variation is not to be seen as due to an ambiguity, but as due to the usual variations on account of the different aims we have in representing what a subject knows. In our attribution, we are representing what a subject knows with a clause. Depending on what we are interested in, the same kind of clause can or cannot represent a certain kind of knowledge. In the coffee/tea dialogue, we are speaking about what John knows. So we need to take on board that he declares that he knows nothing about Bob's attitudes toward tea. Thus, in that case, in order to represent faithfully John's attitudes, we need him to tell us both *that A and that not B* in order to ascribe to him an ascription of the form *whether A or B*. In the television case, instead, we just care about what is on television, not about understanding our friend, and thus it is enough that our friend knows *that B is not the case* for us to be in the position to ascribe to her knowledge with a clause of the form *whether A or B*.

Thus sententialists can easily solve the problem as Schaffer presents it. Propositionalists can solve it too: they can say that we should always consider complete answers, they can say that we should always also consider indirect ones, or they can posit an ambiguity. None of these solutions seems very appealing, in that the first two do not mirror our practise in general and the third seems rather hard to justify; but still we cannot conclude that when it comes to Schaffer's case sententialism is better off than propositionalism.

But, as we will immediately see, there are other versions of the problem of convergent knowledge for which sententialism seems indeed to be better off than propositionalism.

4.3.3 THE PROBLEM OF CONVERGENT KNOWLEDGE GENERALIZED

Schaffer focuses on questions that concern two alternatives – Bush *or* Janet Jackson, Bush *or* Will Ferrell – but it is clear that the problem is not essentially linked to that kind of example and

there are many other similar cases. For instance, the following is discussed by Stout (2010: 396-397):

(THE PROBLEM OF CONVERGENT KNOWLEDGE GENERALIZED)

(ST1)
Take the following questions:
What does 3 + 5 make?
What added to 5 makes 8?.
The two questions are answered by the same proposition, i.e. the one expressed by
3 + 5 makes 8;

(ST2)
Therefore the following are convergent attributions:
Rebecca knows what 3 + 5 makes
Rebecca knows what added to 5 makes 8;

(DATUM)
But Rebecca is 5 years old and she knows an answer to
What does 3 + 5 make?
She knew it before she was asked any other questions. She has learnt it and not forgotten it. The answer to this question is firmly established in her mind. But she does not know an answer to
What added to 5 makes 8?
She can get knowledge of the latter in the same sort of way that the boy in Plato's *Meno* 'uncovers' knowledge that the square of the diagonal of a square shape is twice that of the square of its side. We ask her: "Does 1 + 5 equal 8?", "Does 2 + 5 equal 8?", "Does 3 + 5 equal 8?", she answers these correctly and as she answers the third, her eyes light up; she has worked out an answer to the earlier question: "What added to 5 makes 8?" She did not know an answer to that question before going through this process. She did however know what 3 + 5 makes. She was not reminded of an answer to that question by being asked it. She knows those sorts of sums; but she still has to work out the other sort;

(CONCLUSION)
Answers are not propositions.

What can a sententialist conclude from this case about the representational power of a question? In using

Rebecca knows what 3 + 5 makes

we denote 'what 3 + 5 makes' in order to represent a piece of knowledge of Rebecca's. In

Rebecca knows what added to 5 makes 8,

we instead denote 'what added to 5 makes 8' in order to represent a piece of knowledge of Rebecca's. As Rebecca shows, the two questions do not represent the very same piece of knowledge. But where does the difference in representational power of the questions

What does 3 + 5 make?
What added to 5 makes 8?

come from, considering that they both concern the mathematical truth that 3 + 5 is 8? Interrogative pronouns somehow leave a gap (Fiengo 2007: 7-10), and to use Frege's (1918/1984: 355) terminology, questions in which such pronouns occur are *incomplete*. This is the idea that sententialists can rely on in understanding the different representational power of the two questions above. For they can say that the difference comes exactly from the fact that in the two questions the occurring interrogative pronouns open two different gaps or, as Frege would have said, make the questions incomplete in a different way. For Rebecca to know *what* 3 +5 makes, she needs to know how to fill the gap left by the pronoun, so to say. She knows that 8 fills the gap and thus the attribution is true. But in order to know *what* added to 5 makes 8 she needs to know how to fill another gap and she does not know that. Thus Stout's case shows that the representational power of a question depends also on what gap, in the question, the pronouns occurring leave open.

One might think that this case is a genuine problem for propositionalists, according to which 'wh'-clauses denote propositions that count as correct answers. For one might urge that both

What does 3 + 5 make?
What added to 5 makes 8?;

are answered by

3 + 5 makes 8,

so that an account in term of answers is unable to distinguish

Rebecca knows what 3 + 5 makes

from

Rebecca knows what added to 5 makes 8.

But as Stout (2010: 397-398) himself remarks, accounts in terms of answers are actually able to explain this case. For they can urge that the two questions do not have the same answer (Bach 2005; Textor 2009: 73):

What does 3 + 5 make?

is answered by

8 is what 3 added to 5 makes,

while

What added to 5 makes 8?;

is answered by

3 is what added to 5 makes 8.

If

8 is what 3 added to 5 makes,
3 is what added to 5 makes 8

express different propositions, for example because the propositions expressed have different structures, then accounts in term of answers can differentiate

Rebecca knows what 3 + 5 makes

and

Rebecca knows what added to 5 makes 8,

as they should. Stout's case, therefore, does not show a failure of an account in term of answers.

But this is not the only case Stout discusses, and we can now see that there are other cases, similar to the one just discussed, that do show that the face-value theory is in trouble, while sententialism is not. Here is Stout's second case for the conclusion that 'wh'-clauses cannot denote propositions (2010: 399):

(THE PROBLEM OF CONVERGENT KNOWLEDGE GENERALIZED*)

(ST1*)
Take the following questions:
What added to 5 makes 8?
Is 3 what added to 5 makes 8?
The two questions are answered by the same proposition, i.e. the one expressed by
3 is what added to 5 makes 8.

(ST2*)
Therefore the following are convergent attributions:
Rebecca knows what added to 5 makes 8
Rebecca knows whether 3 is what added to 5 makes 8;

(DATUM*)
But this seems false. Faced with the assertion that 3 is what added to 5 makes 8, Rebecca knows instantly to assent to it (albeit she may get confused by the convoluted expression of the proposition). She knows this despite not knowing what added to 5 makes 8. This may seem paradoxical, but in order to know what added to 5 makes 8 she needs to know a subtraction. In order to know that what added to 5 makes 8 is 3 she only needs to know an addition.

(CONCLUSION*)
Answers are not propositions.

As Stout remarks, an account according to which 'wh'-clauses denote answers and answers are propositions, as the one the face-value theory extended to 'wh'-clauses seems forced to endorse, cannot distinguish

Rebecca knows what added to 5 makes 8

from

Rebecca knows whether 3 is what added to 5 makes 8,

because both questions

What added to 5 makes 8?
Is 3 what added to 5 makes 8?

are answered by the very same proposition, i.e. the one expressed by

3 is what added to 5 makes 8.

Thus this of Stout's cases is a genuine problem for accounts in terms of propositions. On the other hand, it is clear that this second of Stout's cases is not problematic from the sententialist point of view, either. For in this case, we have the following questions:

What added to 5 makes 8?
Is 3 what added to 5 makes 8?

Sententialists explain the difference in the representational power of the two by holding that while in the first an interrogative pronoun occurs which marks a gap that Rebecca needs to know how to fill in order for

Rebecca knows what added to 5 makes 8

to be true, there is no interrogative pronoun in the second question, so that Rebecca needs to know something different for

Rebecca knows whether 3 is what added to 5 makes 8

to be true. For

Rebecca knows what added to 5 makes 8

to be true, i.e. for us to be in the position to represent what Rebecca knows with

What added to 5 makes 8?,

she needs to know how to fill the gap left by 'what', or, to put it differently, she needs to be able to come up with 3. For

Rebecca knows whether 3 is what added to 5 makes 8

to be true, on the other hand, she needs to know something that counts as an answer to

Is 3 what added to 5 makes 8?,

and thus she needs to know whether 3 does or does not have the property designated by the predicate. In other words, for us to be in the position to represent what Rebecca knows with

Is 3 what added to 5 makes 8?,

Rebecca needs, when provided with 3, to know whether it does or does not have the property of being what added to 5 makes 8. Therefore, according to sententialism the two attributions attribute different pieces of knowledge, and can then have different truth-values, as they should.

In this example of Stout's as well, the key aspect of questions that explains what they can represent is, so to say, in what gaps are left open in the questions. Stout's cases show, moreover, that from the sententialist point of view, 'wh'-clauses can mark a difference in attitudes that 'that'-clauses cannot mark. While with attributions like

Jim knows whether Rose likes flamingos

it seems that the 'that'-clause 'that Rose likes flamingos' would equally do, this is not always the case. For both

Rebecca knows what added to 5 makes 8
Rebecca knows whether 3 is what added to 5 makes 8

would be rendered as

Rebecca knows that 3 is what added to 5 makes 8,

and so the distinction would vanish. When it comes to reporting an ability to fill gaps, 'that'-clauses, since they do not have the resources to mark gaps, do not have the same

representational power as 'wh'-clauses.[54] Thus Stout's cases show that *wh*-attributions cannot always be reduced to propositional attitude sentences, and this is simply another way to restate that the case is genuinely problematic for the face-value theory extended to *wh*-attributions, according to which both propositional attitude sentences and *wh*-attributions report an attitude to a proposition.

CONCLUSION

From his cases, Stout (2010: 400) suggests that knowledge is knowledge of answers, but holds that answers are *sui generis* entities not reducible to either facts or propositions, since

> answers may *essentially* be responses to questions; the identity of an answer would then depend on the question it is an answer to.

Embracing Stout's account is not really a viable option for propositionalists, because then the two clauses occurring in

Jim knows that Rose likes flamingos
Jim knows whether Rose likes flamingos

would denote two different pieces of knowledge that Jim has, i.e. a proposition and a *sui generis* answer, and this seems highly counterintuitive. The propositionalist would also need to hold that 'that'-clauses denote *sui generis* answers. But then, I think, we are justified in holding that when it comes to 'wh'-clauses, the sententialist account is to be preferred to an account that, in

[54] Some have suggested that there are names that are genuinely empty, i.e. names that have no denotation. In order to account for propositional attitude sentences in which these allegedly empty names occur, Kaplan 1977: 496, f. 23; Braun 1993 and others have held that we do not need to give up the idea that names are directly referential, and we should instead hold that what Olga believes when

Olga believes that Santa Claus is nice

is true is a *partially filled* or *gappy proposition*, i.e. a structured entity part of which is literally a gap. Even leaving aside the problems that gappy propositions encounter in general, it is clear that propositionalists cannot rely on them in order to solve the issue we are considering here. What Rebecca knows when she knows what added to 5 makes 8 is not something gappy (and moreover, what the gap would look like?), but how to fill a gap.

order to hold on to the thesis that clauses denote the objects of the attitudes, needs to maintain, first of all, that all our mental life consists in answers whose identities depend on the questions they are answers to, and needs, moreover, to populate our world with these *sui generis* entities. In the end, Stout himself recognizes that "having question-involving things out there in reality may be metaphysically unacceptable to some people" (2010: 401). For those people, apart from the considerations on questions without answers and puzzlement states, sententialism is thus to be taken as the correct account of *wh*-attributions.

As we saw at the beginning of this chapter, we cannot prove once and for all that 'wh'-clauses should be treated analogously to 'that'-clauses. Thus no advantage or problem for sententialism with respect to 'wh'-clauses is directly an advantage or problem for sententialism with respect to 'that'-clauses. Nonetheless, as we have seen, there are good reasons to think that it is correct to treat clauses of the two kinds analogously. Thus, I think we are entitled to conclude that, in a weaker way, the sententialist treatment of 'wh'-clauses suggested here is a good sign that the account of 'that'-clauses suggested in the previous chapters may indeed be not just a viable alternative to the face-value theory, as concluded in the previous chapters, but actually a better one.

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